

# **Growth Entrepreneurship**

Do we really understand the Drivers of New Venture Success?

Discussion Paper By John Cavill, Intermezzo Ventures Ltd

Research Sponsored by the Enterprise Hub Network



The Enterprise Hub Network is a SEEDA-backed network focused on helping entrepreneurial individuals and organisations bring highly pioneering and distinctive ideas to market across a range of sectors.

# "Nearly every mistake I've made has been in picking the wrong people, not the wrong idea"

Arthur Rock, pioneering venture capitalist

# Contents

	About the Author Abstract	.iv . v
Chapter 1:	The Venture Capital Industry	<b>.</b> 1 .2 .3 4 6 7 .8
Chapter 2:	Growth Entrepreneurship	<b>11</b> 13 13 15 16 16 18 20 20 21 21 21
Chapter 3:	Personal Networks Investment Decision Framework Summary and Discussion The Equity Gap Emerging links to Entrepreneurial Orientation Emotional Intelligence Dyslexia Biological Factors. The Need for Further Research	22 23 25 25 26 26 27 27 28
	Entrepreneurship in South East England GEM Reports Conclusions	28 29 30 <b>33</b>

# Illustrations

## **List of Figures**

Figure 1. Model of Business Angel Interaction	
Figure 2. Venture Capital Investment Decision Criteria	4
Figure 3. Defining the Entrepreneur	12
Figure 4. Enhanced Value Creation Performance Model	18
Figure 5. A Framework of VC/BA Investment Decision Criterion	
based on academic studies	23
Figure 6. The Impact of Emotional Intelligence on Success	26

## **List of Tables**

Table 1. Valuation Activities Carried Out by Venture Capitalists .	5
Table 2. Stages in the Business Angel's Investment Decision	6
Table 3. Type and Background of Technical Entrepreneurs	17
Table 4. Distribution of Companies and Investment by Region	

## **About the Author**

#### John Cavill MA, ADipC, CDir, FIoD, FCIM

Following early career experience in electronic engineering, sales and marketing and the IT industry, John founded Logical Networks plc, a UK networking services business funded by 3iplc. In 1997 the company was acquired by Datatec Ltd (a Johannesburg Stock Exchange Top 40 public company) having achieved annual sales of £50 million and around 200 staff, after nine years with a CAGR of over 55%. John subsequently became a main Board director with responsibility for European acquisitions and business development. In June 2000 John left Datatec to found Intermezzo Ventures Ltd, a new venture research and consulting company.

John is currently chairman and lead investor in Creating Careers Ltd, the U.K. market leader in online learning solutions for Further Education. He is also a SEEDA Merlin Mentor and High Growth Coach. John holds an MA in Company Direction from Leeds Metropolitan University and is a Visiting Fellow at Henley Management College, where he is conducting doctoral research into the Characteristics of Entrepreneurial Teams. John is a Fellow of the Institute of Directors and Chartered Director, a Fellow of the Chartered Institute of Marketing and Chartered Marketer. In 1995 John received an EFER (European Foundation for Entrepreneurship Research) award as 'one of Europe's Top 500 Dynamic Entrepreneurs' and in 1998 was nominated by 3i Plc for the 'FT/Cartier Venturer of the Year Award'.

The author can be contacted at:

Intermezzo Ventures Ltd. Winkfield Lodge, Winkfield, Berks SL4 2EG U.K. Tel. 01344 887877 / Fax. 01344 887879 Email. john.cavill@intermezzo-ventures.com

# Abstract

Given the importance of entrepreneurial activities for economic growth, wealth creation and technological progress, numerous academic studies have soug to understand more fully the drivers of new venture success. This paper reviews the literature on two key aspects of entrepreneurial activity with the aim of stimulating a debate between regional development agencies, venture capitalists, business angels, business service providers, educationalists and entrepreneurs.

Chapter One reviews the literature on the venture capital industry, with particular focus on the investment decision making process adopted by venture capitalists and business angels. The literature highlights the importance of entrepreneurial teams to raising equity finance, which is readily acknowledged by these sources. However, the literature also suggests that both formal and informal sources of equity finance could improve their return on investment by developing a better understanding of the characteristics of entrepreneurs and by making more use of 'decision tools'.

Chapter Two reviews the literature on the various attributes of successful entrepreneurs. Particular focus is given to the experience and personality of lead entrepreneurs, and the characteristics of their top management teams in terms of their composition and interaction. Various measures of new venture potential are also considered. A suggested framework is then provided based on the numerous variables that have been found to influence venture capitalists' or business angel's investment decision.

Chapter Three summaries the overall findings of the literature review and includes discussion on the nature of the perceived 'equity' gap', and the suggestion that the entrepreneur of the 21<sup>st</sup> Century may well be defined by emotional intelligence. More recent exploratory research also covered may go towards solving the 'nature versus nurture' debate, as links have now been found between entrepreneurial orientation and dyslexia, as well as DNA.

This paper was especially commissioned by SEEDA (South East Economic Development Agency) and presented at the SEEDA Enterprise Hub Network Showcase Event in London on 22<sup>nd</sup> February, 2007.

# Chapter 1: The Venture Capital Industry

This chapter reviews the literature on the venture capital industry with particular focus on the investment decision making process adopted by venture capitalists (formal investors) and business angels (informal investors). Particular attention is paid to their assessment of human capital and potential decision tools.

The U.K. venture capital industry<sup>1</sup> was established as a formally distinct industry during the latter part of the 1970s (Yli-Renko and Hay, 1999) to become the second largest in the world (behind the U.S.), accounting for almost half of all European private equity investments (Urbas, 2002). The industry has four main players: entrepreneurs who need funding; investors who want high returns; investment bankers who need companies to sell; and the VCs who make money for themselves by making a market for the other three (Zider, 1998). Venture capital is broadly defined as capital which is not secured by assets and is invested in or loaned to a company by an outside investor. It is often referred to as risk capital since it is not only unsecured, but generally lacks liquidity as well (Bachher and Guild, 1996). Venture capital companies can be differentiated by their source of funds; either via private funds (e.g. coming from financial institutions, institutional investors, large companies and private individuals) or government funds (Manigart et al., 2002). However, in recent years the supply of start-up and early stage equity finance has become more dependant on business angels, as venture capital funds are no longer able to accommodate a large number of small deals with heavy due diligence requirements (European Commission, 2002).

## The Importance of Venture Capitalists

VCs are responsible for screening investment opportunities. And after evaluating a selected few, which conform to their funding guidelines, present a summarised investment proposal to the Venture Capital Firm's (VCF's) board for approval (Bachher and Guild, 1996). The major constraint on VCFs is operational. A maximum number of investments a VC can manage at any one time is around six, and appropriate investment

See - BVCA (2004). A Guide to Private Equity. London: British Venture Capital Association. Available from: http://www.bvca.co.uk/publications/guide/intro.html

The U.K. accounts for almost half of all European equity investments

<sup>&</sup>lt;sup>1</sup> To avoid any confusion between the academic literature published in the USA and Europe, the term "venture capital" is used throughout this paper to describe the seed and expansion stages of investment. However, it should be noted that the term "private equity" is also used to describe medium to long-term finance provided in return for an equity stake in potentially high growth unquoted companies. Some commentators use the term "private equity" to refer only to the buy-out and buy-in investment sector. Others, in Europe but not the USA, use the term "venture capital" to cover all stages, i.e. synonymous with "private equity". In the USA "venture capital" refers only to investments in early stage and expanding companies.

fees must be generated to support each VC and their administrative overheads (Golis, 1998). VCs differ in the screening criteria used to guide their investments (Tyebjee and Bruno, 1984). However, although VCs think they know the "right" cues for predicting the outcome of a venture opportunity, prior research indicates the results of their decisions are poor, as eighty percent of the companies VCs invest in generate only twenty percent of the total benefit to the fund (Zider, 1998). While corporations minimise risk by limiting investments to one or two opportunities at a time; venture capital firms (VCFs) minimise risk by investing in a portfolio of businesses and anticipate that 15-20% will be blockbusters, 25-25% will be winners, 25-30% will break even, and 15-25% will fail (Laurie, 2001).

### **The Role of Business Angels**

The trend in the institutional venture capital industry towards investing in larger and later stage deals, at the expense of the smaller early-stage investment has become evident in recent years (Harrison and Mason, 2000), due largely to the amount of money that has been flowing into the industry. This has resulted in larger VCFs, which in turn has driven up the minimum size of investment that they are willing to make at each stage of investment. This 'equity gap', considered to be between £250,000 and f.1m is now been filled by the informal venture capital market (HM Treasury/Small Business Service, 2003), which supplies smaller amounts of funding for companies at their seed, start-up and early stages of growth (Mason and Harrison, 1996; van Osnabrugge, 2000). The informal venture capital market comprises of high net worth individuals, more commonly known as Business Angels, who provide this important source of finance for new and growing businesses, filling the gap between founders, family and friends and institutional VC funds (Mason and Harrison, 2000). Most business angels (BAs) are value-added investors, contributing their commercial skills, entrepreneurial experience, business know-how and contacts, through a variety of hands-on roles including consulting help, and a seat on the board. They also prefer to invest 'close to home' and to syndicate with other private investors.

Business angels typically have a portfolio of two to five investments, which in total comprise of 5% to 15% of their overall investment portfolio (Mason, 2006a). On average, BAs anticipate holding individual investments for five to eight years with an expectation of realising a capital gain that provides the equivalent of an after-tax annualised ROI of 30 to 40% (Feeney et al., 1999). As with VCs, the key considerations for this informal group of investors are associated with the attributes of the entrepreneurs and the market/product characteristics of the business (Mason and Harrison, 1996). Despite this, relatively few business angels actually undertake detailed investigations of the entrepreneur/management team relying on instinct instead.

The market for BAs is substantially larger than the institutional VC market in terms of the amounts invested at start-up. BAs may also invest alongside VCFs focused on relatively small scale start-up and early stage investments (Harrison and Mason, 2000; van Osnabrugge, 2000) using their network, technology or the entrepreneurial experience of the angel to assist in the due diligence process and in the post-investment relationship with the portfolio firm.

80% of companies VCs invest in generate only 20% of the total benefit to the fund

Business Angels provide an important source of finance for new and growing businesses





Source: European Commission (2002)

Two-thirds of VCFs also refer deals to *business angel networks* (BANs), either exclusively or at the same time as they are referred to specific business angels. This suggests that BANs, which act as an introduction service for investors and entrepreneurs seeking finance, are playing an important role in linking VC and business angel markets (Harrison and Mason, 2000) (see Figure 1). BANs tend to be formed by BAs who have known one another prior to its formation, either through social or business networks. Individual network members invest directly in entrepreneurial ventures of their own choosing, generally as part of a syndicate of other members. The composition of these syndicates are likely to be fluid, varying from investment to investment (Mason and Harrison, 1996).

## **The VC Investment Decision Process**

The VC investment decision-making process is designed to reduce the risk of adverse selection criteria. The first published model of this process (Tyebjee and Bruno, 1984) focused on investment criteria based on five sequential steps i.) deal origination ii.) screening iii.) evaluation iv.) structuring and v.) post-investment activities, but did not examine the specific activities that VCs undertake. This shortcoming was later addressed by Fried and Hisrich (1994) who proposed a modified model taking into account differences observed between early and late-stage investors, and extending the screening and evaluation phases. Fifteen generic criteria common to the investments studied were identified, based on 18 case studies from U.S. VCs, which covered a variety of different industries and stages of investment. These criteria were broken down into three basic elements: concept, management and returns. However, more recent research on the VC investment decision process (Zacharakis and

BANs act as an introduction service for investors and entrepreneurs seeking finance Shepherd, 2001) suggests that VCs still lack a strong under-standing of how they make investment decisions.

#### The Business Plan

VCs rely almost exclusively on the entrepreneurial business plan as a principal tool for the initial screening process, and over the past 20 years the majority of the empirical research into VC decision making has produced lists of criteria which VC practitioners *say* that they use for these purposes (Tyebjee and Bruno, 1984; Hall and Hofer, 1993).

### Figure 2. Venture Capital Investment Decision Criteria



#### Source: Tyebjee and Bruno (1984)

There are four main aspects of a business plan that are used to evaluate the risk and potential profit associated with a particular deal (Tyebjee and Bruno, 1984). These are i.) marketing factors and the ventures ability to manage them effectively ii.) products competitive advantage and uniqueness iii.) quality of the management team, particularly in its balance of skills and iv.) exposure to risk factors beyond the ventures control (see Figure 2). However, in sharp contrast Mason and Harrison (1996) found that gaps in the management team were not strong enough to be the main factors for deal rejection by business angels in their screening process.

Venture Capital firms receive a large number of business plans or proposals from entrepreneurs on an annual basis; far more than they can possibly fund with the size of the staff and the portfolio of the typical venture fund. Broad screening criteria are therefore used to initially seek out the most attractive investment opportunities and to reduce these proposals to a more manageable number based on four criteria: i) the size of the investment and the investment policy of the venture fund ii) the technology and market sector iii) geographic location and iv) stage of financing (Tyebjee and Bruno, 1984). A more recent study using verbal protocol analysis at the initial screening stage (Mason and Stark, 2004) showed that VC's give greatest emphasis to market issues (22%) and financial issues (21%), with the entrepreneur (12%) and strategy (11%) of secondary importance.

### Table 1. Valuation Activities Carried Out by Venture Capitalists

ACTIVITY	HOW OFTEN (%)
Interview all members of management team	100
Tour facilities	100
Contact entrepreneur's former business associates	96
Contact existing outside investors	96
Contact current customers	93
Contact potential customers	90
Investigate market value of comparable companies	86
Have informal discussions with experts about product	84
Conduct in-depth review of pro forma financials prepared by company	84
Contact competitors	71
Contact banker	62
Solicit the opinion of managers of some of your other portfolio companies	56
Contact suppliers	53
Solicit the opinion of other venture capital firms	52
Contact accountant	47
Contact attorney	44
Contact in-depth library research	40
Secure formal technical study of product	36
Secure formal market research study	31

Source: Fried et al. (1993)

### **Screening Investment Opportunities**

# VCs often rely on intuition or 'gut feel'

The majority of studies in the investment decision-making field belong to the "espoused criteria" school, based on what VCs *say* they use to screen investment opportunities, or the "known attribute" school, where entrepreneurship researchers articulate clearly recognisable attributes that distinguish viable, successful ventures, from ventures that are prone to failure (MacMillan et al., 1985; Mainprize et al., 2003). In a later replication Fried et al. (1993) found similar results from surveying members of the U.S. National Venture Capital Association (NVCA) on criteria used by VCs to evaluate new venture proposals (see Table 1).

Of the four criteria measured; the entrepreneur, the product, the market and the investment, entrepreneur variables proved most significant overall. However, Zacharakis and Meyer (1996) determined that past studies of this type that rely on post hoc methodologies, such as interviews and surveys, to capture the VC decision process may be biased due to poor introspection on the part of VCs, who often rely on intuition or "gut feel" (MacMillan et al., 1987; Hisrich and Jankowicz, 1990). This confirmed an earlier study by Khan (1986) who measured the extent of agreement between the judgements of VCs, as represented by a set of expected outcome rating for ventures and the actual outcomes, and found that VCs are not exceptional predictors of actual outcomes.

## Table 2. Stages in the Business Angel's Investment Decision

Deal origination	The investor becomes aware of the opportunity – typically through one of the following channels: chance encounter, referral from business associates or other individuals or organisations in their network, or personal search.
Deal evaluation	Two stages: (i) Initial screening/first impressions: key considerations are the 'fit' with the investor's personal investment criteria, their knowledge of the industry/market and their overall impression of the potential of the proposal. Also influenced by the source of the referral. (ii) Detailed evaluation: the investor will examine the business plan in detail, consult with associates, will meet the principals, take up references, research the proposal. The decision will be influenced by the potential of the industry, the business idea, impressions of the principals and potential rewards.
Negotiation and contracting	Negotiations with the entrepreneur over valuation, deal structuring and the terms and conditions of the investment. Main factor is pricing.
Post-investment involvement	Investor is likely to become involved with the business in some kind of hands-on capacity, including advice and mentoring, networking, financial input and member of the board. Degree of involvement may vary according to the stage of business development and the performance of the business.
Harvesting	Exit from the business, either because it fails or by selling their shares to another investor. Investors normally exit from successful investment by means of a trade sale.

Source: Mason (2006)

The investment decision process adopted by business angels (see Table 2) is similar in most respects to that of venture capital funds (Tyebjee and Bruno, 1984; Fried and Hisrich, 1994) but less sophisticated.

Most business angels play an active role in their investments

Most business angels play an active role in their investee businesses. However, at one extreme there are passive investors who are content to receive occational information to monitor the performance of their investment, while at the other extreme are investors who use their investment to buy themselves a job (Mason, 2006).

#### **Methods of Human Capital Valuation**

*Human capital* theory states that people invest in themselves, through the accumulation of different types of human capital goods such as formal education and 'productive' knowledge and information with the potential of increasing their owner's market and non-market productivity (Schultz, 1961). The ultimate application of human capital valuation theory is to develop methods that achieve the most accurate valuation possible, while consuming the fewest resources possible.

Smart (1999a; Smart, 1999b) assessed seven possible methods of human capital assessment methods used by VCs comprising of i) Job Analysis to determine what human capital is needed for a venture to succeed ii) Documentation Analysis based on analysis of resumes, legal searches, publications, or any other written material iii) Past-oriented Interviews involving discussions with target manager about actual evens in the career history iv) Reference Interviews involving discussions with people who have witnessed a target manager's behaviour. Possible sources of reference interviews are: personal references, supervisors, co-workers, industry players, current employees, suppliers, customers, lawyers, accountants, bankers or other investors v) Work Sample sessions in which the venture capitalist "quizzes" the target managers on issues related to the business vi) Psychological Testing and vii) Formal Assessment Centre. Based on these seven primary tools or methods available for human capital assessment, Smart (1999a) studied the human capital assessment methods used in 86 cases, which were provided by 51 venture capitalists from 48 different venture capital organisations across the United States. The results of the sample surveyed showed that psychological testing is rarely used by VCs and formal assessment centres were not used at all.

Although Smart (1999a) and later Erikson and Nerdrum (2001) hypothesized that the private equity investing experience and interviewing skill of the venture capitalist were related to the accuracy of the human capital valuation, neither factor on its own had as strong an association as past-oriented interviews. This important study (Smart, 1999a) established a clear link between an investor's approach to human capital valuation and the deal success. Yet, somewhat surprisingly, it was found that the best practices were used less frequently by VCs than the worst practices, indicating opportunities for improved IRR through more effective human capital practices.

Smart (1999a) also identified several different approaches to evaluating management which he named as follows: i) *Airline Captains* are systematic and thorough in their collection and analysis of data, the way that an airline captain conducts pre-flight checks. They base their analysis on data rather than just intuition. ii) *Art Critics* make snap judgments based on intuitions. They think they can assess a person quickly, the way an art critique judges a painting. iii) *Sponges* soak up data in a non-systematic way

Psychological testing is rarely used by VCs

Venture Capitalists who use the 'airline captain' approach to human capital evaluation achieve the highest IRR and then analyse it unsystematically. iv) *Infiltrators* try to become a quasi member of the management team. They spend many weeks or months partaking in planning meetings and even visiting potential customers together with target managers prior to making an investment decision. v) *Prosecutors* aggressively question the target managers in a formal setting, the way a prosecution attorney questions a witness. vi) *Suitors* are more concerned with wooing management than assessing them, so they spend time trying to make a good impression rather than critically evaluate the management team, and vii) *Terminators* are convinced that it is impossible to achieve accurate human capital valuations.

As a result of this study Smart (1999a) determined that venture capitalists who used the *airline captain* approach to human capital valuation achieved by far the highest average IRR, but surprisingly only 13% of venture capitalists used this approach. Erikson and Nerdrum (2001) went on to suggest a conceptual framework for the valuation of founder managers' entrepreneurial potential termed entrepreneurship capital, which is based on their complementary capacity to identify new opportunities, to combine or coordinate scarce resources; and to see new initiatives through to fruition. A study of institutional portfolio managers' investment criteria (Mavrinac and Siesfeld, 1998) suggested that 35% of an investment decision is driven by non-financial data with the top two non-financial criteria being 'execution of corporate strategy' and 'management credibility'. And a later study (Hay, 2001) found that since 1999 turnover at chief executive level had increased five-fold largely due to their inability to execute strategy, indicating that competence assessment at this level was becoming increasingly ineffective.

## **Venture Performance Criteria**

Numerous studies of determinates of new venture potential have been conducted over the past twenty five years. Founders focusing on rapid growth are primarily concerned with sales growth, growth in market share and cash flow issues. However, Chandler and Hanks (1993) concluded that cash flow is perceived to be significantly more important than return on assets (ROA), return on investment (ROI), net worth and market share. In turn, sales growth, net profits, and return on sales are perceived to be significantly more important than ROA, ROI or market share, while net worth is perceived to be more important than ROA. In reality there is a major issue in measuring the performance of emerging businesses due to the willingness of VCs and private investors to disclose information.

Because of the difficulties in obtaining rate of return (ROR) data for private portfolio investments, due primarily to the associated confidential and comparability issues, a survey of 80 U.S. VC firms, made a distinction between "winners", "living dead", and "losers" for classifying investments (Ruhnka et al., 1992). The "winners" were seen as producing adequate multiples of return on investment, while "losers" resulted in a loss of invested funds and "living dead" investments represented the middle ground. Although "living dead" investments generally maintain a positive cash flow and meet their debt obligations, they do not generate enough revenue growth or profitability to fulfil their investors' expectation.

#### Terminators are convinced that it is impossible to achieve accurate human capital valuations

69% of otherwise sound investments fail due to bad management Although much emphasis has been placed on the importance of entrepreneurial teams in the venture capital investment decision making process, surprisingly little research, apart from team demographics, has been conducted in this area. The result of a survey commissioned by SJ Berwin (2003), which canvassed the views of over 300 senior European venture and buyout investors across the U.K, France, Germany and Spain, found that 69% of otherwise sound venture capital investments that failed were due to bad management. In contrast 14% failed due to flawed business models and 17% due to external shocks such as natural disasters. The survey concluded by posing the question "If management does play such a pivotal role, it has to be asked why the quality of assessment remains so patchy?".

# **Chapter 2: Growth Entrepreneurship**

This chapter reviews the literature on the various attributes of successful entrepreneurs. Particular focus is given to the experience and personality of lead entrepreneurs, and the charateristics of their top management teams in terms of their composition and interactions. Various measures of new venture potential are also considered.

The term 'entrepreneur' can be traced back to 1734 when Richard Cantillon2 first introduced it into economic literature. There has since however been a lack of unanimity among economists in their attempt to identify the components of entrepreneurship (Cuevas, 1993/94). So much so that some early academic papers (Hull et al., 1980; Perry, 1990) attempted to define the psychological characteristics of entrepreneurs by using the analogy of A. A. Milne's mythical Heffalump in his book *Winnie-the-Pooh*, which "comes in every shape and size and colour". Perhaps somewhat more surprisingly, entrepreneurship has also been compared to pornography (Mitton, 1989) (see panel).

### **Attributes of Entrepreneurs**

A survey of leading U.S. academic researchers in entrepreneurship, business leaders and politicians in which respondents were asked for their definition of 'entrepreneurship' resulted in a wide range of viewpoints that provided no single or concise definition for the term (Gartner, 1990). The concept of entrepreneurship has also been linked to many different levels including the individual, groups and "whole organisations". *Entrepreneurial orientation* represents entrepreneurial processes that address the question of *how* new ventures are undertaken, whereas (Lumpkin and Dess, 1996) suggested the term *entrepreneurship* refers to the content of entrepreneurial decisions by addressing *what* is undertaken. However, Ronstadt (1984) seems to have captured the essence of the term in his own definition:

"Entrepreneurship is the dynamic process of creating incremental wealth. This wealth is created by individuals who assume the major risks in terms of equity, time and/or career commitment of providing value for some product or service. The product or service itself may or may not be new or unique but value must somehow be infused by the entrepreneur by securing and allocating the necessary skills and resources".

There is increased recognition that entrepreneurship can involve the purchase of an existing company as well as the creation of a new one, and that leading individuals in MBOs and MBIs display similar characteristics and motivations to those of entrepreneurs generally (Wright et al., 2000). It is also important to note that 'one can be entrepreneurial without being

Entrepreneurship and pornography have a lot in common: they are both hard to define

<sup>&</sup>lt;sup>2</sup> Little is known about Cantillon except that he was Irish and turned briefly from a successful banking career, mainly in France, to write what is considered one of the most outstanding works in economic history *Essay on the Nature of Commerce* (1755, 1959).

self-employed and self-employed without being entrepreneurial' (Utsch et al., 1999).





In an effort to distinguish the basic attributes of entrepreneurs from the attributes of other more common business roles Timmons and Spinelli (2003) developed a simplified model (see Figure 3). This model clearly differentiates the *inventor* and *manager/administrator* who might also like to consider themselves as entrepreneurs but lack the necessary skills of creativity and innovative, or general management and networking. Bolton and Thompson (2004) on the other hand differentiated the general business entrepreneur in terms of the strategy which they adopt.

- i.) *The enterprising person* who establishes a small or micro business which has only limited growth potential and creates a limited number of jobs.
- ii.) *The entrepreneur* who creates a significant business by finding important ways to compete effectively and out-perform rival organisations while remaining firmly in control. They might also sell their business once it reaches a certain size then start a new one from scratch.
- iii.) *The growth entrepreneur* who creates a sustained high-growth business adding to the products, services and markets it begins almost certainly becoming international in its reach. They are also leader-entrepreneurs who habitually champion new ideas which regularly give the business a fresh impetus.

Source: Timmons and Spinelli (2003)

An additional category of *Ultrpreneur* (Arkebauer, 1993) has also been introduced to describe ultra high growth entrepreneurs who are capable of taking a venture from start-up to harvest in three years or less.

### **Growth Entrepreneurs**

This paper primarily considers the activities of growth entrepreneurs who establish themselves in a corporate form, and who must therefore be assumed to be more ambitious than entrepreneurs generally (Kjeldsen and Nielson, 2000), which is a key criteria for VCs. This category of entrepreneur is distinct from business owners in general, which includes the *self-employed entrepreneur* and the *leisure entrepreneur* who starts a relatively low level activity. Economist David Birch coined the name Gazelles to describe a group of American businesses that had demonstrated at least 20% sales growth every year from 1990 to 1994, starting with a base of at least one hundred thousand US dollars (McGrath, 2002), which equates to just over a doubling in sales during this period. Although this phenomenon is not generally referred to in academic literature, it is a phrase that is regularly used in the business press to describe high growth companies. Interestingly, Inc. Magazine (Case, 1996) noted that at the time, Gazelles represented no more than 3% of all American businesses.

When evaluating venture proposals, MacMillan et al. (1985) found that just under half the VCs surveyed in their study would not even consider a venture which does not have a balanced team for the venture, and above all it was the quality of the entrepreneur that ultimately determined the funding decision, with five of the top ten most important criteria being concerned with the entrepreneurs' experience or personality. This poses the question: If this is the case, then why is so much emphasis placed on the business plan that generally has little to indicate the characteristics of the entrepreneur? While it is important to provide detail discussion on the product/service, the market and the competition, this is not enough. The entrepreneur must be able to demonstrate that he has staying power, has a track record, can react well to risk, and has familiarity with the target market (MacMillan et al., 1985). Alternately he/she must be capable of building and leading a management team with these characteristics.

Three types of factors have been used to identify the characteristics of entrepreneurs: *demographic variables*, such as family background, age, education and experience; *psychological variables*, such as need for achievement, need for power, locus of control, attitudes towards risk and tolerance of ambiguity and; *behavioural variables*, such as initiative, energy and drive, self-confidence, persistence, realism and openness to criticism (Hofer and Sandberg, 1987). However, although some of these factors, especially the demographic and psychological variables, can be used to predict the likelihood that someone will seek to start a new venture, most demographic factors, including both education and experience, were found to have little impact on new venture success.

### Founder Competences and Experience

Many of the general studies of entrepreneurship have equated the term "entrepreneur" with "founder-manager" (Lorrain and Dussault, 1988).

Ultrapreneurs are capable of taking a venture from start-up to harvest in three years or less

Gazelles grow at 20% per year for a minimum of consecutive four years

Chandler and Jensen (1992) measured *founder competence* by breaking it down into three scales:

- i. *entrepreneurial competence* consisting of a) ability to accurately perceive unmet consumer needs, b) time and energy spent looking for products or services that provide real benefit to customers and c) ability to identify the goods and services people want.
- ii. *management competence* consisting of a) ability to achieve results by organising and motivating people, b) ability to organise resources and tasks, c) ability to keep an organisation running smoothly and d) ability to supervise, influence and lead people.
- iii. *drive* consisting of a) extremely strong internal drive to see venture through to fruition, b) make venture succeed no matter what gets in the way and c) persistence in making the venture succeed.

At least three functional *managerial capabilities* are also assessed in terms of the management skills, marketing skills and financial skills of individual venture team members (Tyebjee and Bruno, 1984). These and other key founder competences are confirmed or otherwise by taking out character references on team members for comparison against information provided to VCs during interviews or detailed within the venture proposal.

During their investment decision process VCs consider the capabilities of the founding team, where *novice founders* are individuals with no previous experience of founding a business, and *habitual founders* have established at least one other business prior to the start-up of the current new independent venture. Although VCs may consider prior founder experience desirable, it is not an indication that the founder is able to identify an opportunity the second time around which can achieve greater performance than the first (Birley and Westhead, 1993). There is also no evidence to suggest that new businesses established by habitual founders with prior experience of business venturing are particularly advantaged compared to their less experienced counterparts.

When comparing the prior experience of founders Westhead and Wright (1997) established; novice founders were found to be significantly more likely to start a business in the same industry as their last employer, with *portfolio founders* being more likely to have changed their industry focus. Habitual founders, particularly *serial founders*, are significantly more likely to have worked in a small firm with less than 100 employees prior to start-up. Whereas in marked contrast, significantly more novice founders rather than habitual founders are more likely to have worked in a large firm with more than 1,000 or more employees prior to start-up.

Others (Carland and Carland, 1997) took a broader view of entrepreneurs, suggesting three distinct forms of owner/managers of businesses who differ in terms of their personality and business objectives. *Microentrepreneurs* seek freedom and family support, while *entrepreneurs* pursue wealth and accolades. However, as soon as the objectives of both these types are satisfied they turn away from entrepreneurial activities. *Macroentrepreneurs*, on the other hand, pursue growth and profits to the

#### VCs consider prior founder experience desirable

Novice founders are more likely to start a business in the same industry as their last employer exclusion of personal considerations and seek to revolutionize or dominate the industries in which their businesses are involved.

### **Entrepreneurial Personality Types**

Minor (1996) found substantial support for the conclusion that four different personality patterns found in entrepreneurs exert a dominant influence on the subsequent success of entrepreneurial ventures. The study consisted of 100 established entrepreneurs in Buffalo, New York who were accumulated over a 7-year period. The firms of these entrepreneurs included both service and manufacturing of which 49% were start-ups, 21% had more than one partner (i.e. an Entrepreneurial Team) and 12% were involved in some type of MBO/MBI.

Various psychological tests and questionnaires were administered and the scores were assigned to clusters to measure each of the four personality patterns based on conceptual considerations.

- i. *Personal Achievers* have a need to achieve, a desire for feedback, a desire to plan and set goals, strong personal initiative, a strong personal commitment to their organisation, a belief that one person can make the difference, and a belief that work should be guided by personal goals, not those of others.
- ii. *Empathetic Super Salespeople* have a capacity to understand and feel with others, a desire to help others, a belief that social processors are very important, a need to have strong positive relationships with others, and a belief that a sales forces is crucial to carry out company strategy.
- iii. *Real Managers* indicate a desire to innovate, a desire to be a corporate leader, decisiveness, positive attitudes to authority, a desire to complete, a desire for power and a desire to stand out from the crowd.
- iv. *Expert Ideas Generators* exhibit a desire to innovate, a love of ideas, a belief that new product development is very important for company strategy, good intelligence, and a desire to avoid taking risks.

Two additional scores were generated to describe what are referred to as *Complex Entrepreneurs,* which consisted of a number of key entrepreneurial patterns the individual possessed, along with the sum of the four patterns (Minor, 1996). One of the realities of new venture development is that no one person can do the entire job themselves. Successful entrepreneurs therefore seek the best people to support them, share the rewards of their success and create a climate that encourages people to do their best (Hofer and Sandberg, 1987).

Begley and Boyd (1987) examined the prevalence of five psychological attributes in founders (i.e. entrepreneurs) and non founder small business managers.

i. *need for achievement* - high achievers set challenging goals and value feedback as a means of assessing goal accomplishment. They compete with their own standards of excellence and continuously seek to improve their performance

One of the realities of new venture development is that no one person can do the entire job themselves

# Successful entrepreneurs seek the best people to support them

- ii. locus of control perceived ability to influence events in ones life
- iii. risk-taking propensity likelihood of risk taking
- iv. *tolerance of ambiguity* when there is a lack of sufficient cues to structure and situation.
- v. *type A behaviour* impatience and irritability, time urgency, driving ambition, accelerated activity, and generalized competitiveness.

It was established that founders had a higher need for achievement, higher risk-taking propensity and higher tolerance of ambiguity than non founders. However, there was no difference in the two groups' locus of control and Type A tendencies. The relationship between these "entrepreneurial" attributes and the financial performance of the firm were also considered but none was found.

#### Lead Entrepreneurs

A study of owner/managers from the inc.500 list of the fastest growing firm in the United States set out to determine the existence of a *lead entrepreneur* (Ensley et al., 2000). While the owner and manager of a firm is considered to be an entrepreneur, a group of owners and managers of the same firm is considered to be a group or team of entrepreneurs. However, Ensley et al. (2000) found that some characteristics of the lead entrepreneur (i.e. the chief executive) were found to positively effect the performance of these ventures. While the results of the study suggest that planning, recognising opportunities, and evaluating the organisation are skills which all of the members of the entrepreneurial team members possessed, lead entrepreneurs had the entrepreneurial vision to see what is not there and the self-confidence to make that vision real. As a result, these high growth lead entrepreneurs were classified (somewhat tongue in cheek) as *alpha beffalumps*.

A more recent study by Ciavarella et al. (2004) used the *Big Five* personality attributes (Costa and McCrae, 1997) to explore the impact of psychological characteristics of the lead entrepreneur on the survival of a new venture. The five factors of personality are i) extraversion, ii) emotional stability, iii) agreeableness, iv) conscientiousness, and v) openness to experience. The results of this study indicated that neither extraversion nor emotional stability, nor agreeableness was predictive of the likelihood of long-term new venture survival, although an entrepreneur's conscientiousness and openness to experience were positively related. This seems to suggest that those who stick to the task at hand rather than being open to a variety of opportunities are better suited to lead the venture to maturity.

#### **Technology-Based Entrepreneurs**

Increasing attention has been focused on *technology-based entrepreneurs*, primarily due to the dependence of technology-based ventures on their high degree of technology expertise, which is translated into new technologies, products or processes. Cooper (1971) describes a

Lead entrepreneurs have the entrepreneurial vision to see what is not there and the self confidence to make that vision real *technologically-based firm* as "a company which emphasises research and development or which places major emphasis on exploring technical knowledge. It is often founded by scientists or engineers, and usually includes a substantial percentage of professionally technically trained personnel". Although there have been numerous studies of such individuals compared to the general population of entrepreneurs, Jones-Evans (1995) found from his own in-depth study that it was possible to classify individual technical entrepreneurs into four broad categories, namely "research" (previously referred to as the academic or scientist entrepreneur), "producer", "user" and "opportunist" (see Table 3). The "ideal" high-tech company, regardless of the industry sector, will be able to IPO with a prestigious underwriter less than five years after the first venture capital has been invested, or be acquired at a comparable valuation (Bygrave, 1998).

Table 3. Type and Backgrou	und of Technical Entrepreneurs
----------------------------	--------------------------------

Type of technical entrepreneur	Sub-category and/or background		
"Research" technical entrepreneur	<ul> <li>i) "Pure research" technical entrepreneurs:</li> <li>Where the owner-managers' entire career prior to start-up occurs in a research organisation such as academic or government/non-profit organisational laboratories</li> </ul>		
	<ul> <li>ii) "Research-producer" technical entrepreneurs:</li> <li>Where the owner-managers, despite spending the majority of their careers in academic research positions, have minor experience of the commercial organisational background associated with the "producer" technical entrepreneur, usually in a research department as:</li> </ul>		
	<ul> <li>a) industrial scientists who began their career in manufacturing companies, before undertaking a research position in an academic institution or</li> <li>b) academic researchers who have moved from a research environment into a commercial organisation</li> </ul>		
"Producer" technical entrepreneur:	Where the entrepreneur has been involved in the direct commercial production or development of a process, usually in a large organisation		
"User" technical entrepreneur	<ul> <li>i) "Pure user" technical entrepreneur:</li> <li>Where the entrepreneur is wholly involved as end-users in the application of a particular technology</li> </ul>		
	<ul> <li>ii) "User producer" technical entrepreneurs:</li> <li>Where the entrepreneur has pervious experience of both the development and production of technology, as well as involvement in developing specific expertise in the marketing of technical products</li> </ul>		
"Opportunist" technical entrepreneur:	Where the entrepreneur has identified a technology-based opportunity and, while initiating and managing a small technology-based venture, either has little or no technical experience or whose previous occupational experience was within non-technological organisations		

Source: Compiled from Jones-Evan (1995)

### **Measures of Success**

The result of Hofer and Sandberg's (1987) study indicated that the primary linkage between new venture success and the entrepreneur seemed to involve the entrepreneurs' behavioural characteristics. Stuart and Albetti (1987) described fifteen factors contributing to initial start-up success based on five main categories including market, innovation, strategy, organisation and leadership, which comprised of high levels of entrepreneurship, experience and a well-balanced team of three or more persons. Coincidently Sandberg and Hofer (1987) suggested that new venture performance (NVP) is a function of the characteristic of the entrepreneur (E), the structure of the industry in which the venture competes (IS), and its business strategy (S) as indicated below.

$$NVP = f(E, IS, S)$$

Herron and Robinson (1993) combined this model with that of Hollenbeck and Whitener's (1998) model (see Figure 4), which indicated the causal impact of personality traits on performance, moderated by ability and moderated by motivation, to create an enhanced value creation performance model (VCP).

### Figure 4. Enhanced Value Creation Performance Model



Source: Herron and Robinson (1993)

A decade later Chrisman (1998) reviewed 62 research models used in studies of new venture performance. He suggested that despite the importance and appeal of the model proposed by Sandberg and Hofer (1987) it was incomplete, and there are other variables that can affect the performance of new ventures that go beyond the skills and behaviour of its founders, the form of its strategies, and the structure of the industry.

The primary linkage between new ventures success seems to involve the entrepreneurs' behavioural characteristics More specifically, Sandberg and Hofer's (1987) model does not include the resources (R), upon which a venture's business strategy (BS) must be based, or the organizational structure, processes, and systems by which the venture's strategy (OS) must be implemented as shown in the enhanced functional relationship indicated below.

$$NVP = f(E, IS, BS, R, OS)$$

Some entrepreneurship scholars began to suggest that stronger links might be observed by expanding the scope of analysis to study the characteristics and competencies of entrepreneurial teams and their linkage with new venture performance. For instance, Roure and Keeley (1990) developed and tested a model using these assumptions and found that team completeness and prior joint experience were strongly associated with superior firm performance, whereas the individual entrepreneur's various forms of experience had no effect.

#### **Entrepreneurial Teams**

In 1987 the Harvard Business Review published an article in which Robert Reich, former U.S. Secretary of Labour, argued that "the time had come for entrepreneurship to be reconsidered, for the elevation of the team to the status of hero, and for the acceptance of the concept of multiple founders" (Reich, 1987). However, it was not until some time later that researchers into entrepreneurship started to refer to new venture; 'founders', 'founding teams', 'senior management teams' or 'top management teams' as *Entrepreneurial Teams*. It has been speculated that entrepreneurial teams and employees could be filling the gaps in competencies exhibited by the primary founder of the company (Sandberg, 1992). Taken in concert, studies of this type have led to a belief that team founded ventures have a greater likelihood of success than those founded by solo entrepreneurs.

Drucker (1985) proposed that "building a top management team could be the single most important step towards entrepreneurial management in a new venture" and since Hambrick and Mason's (1984) seminal work on top management teams' demographic characteristics, organisation and strategy researchers have extended their "upper echelons" theory to predict the top management team (TMT) characteristics that will be reflected in team performance. Vyakernam et al (2000) later suggested that as "there is no such thing as a perfect manager, and there is also unlikely to be a perfect entrepreneur too". Consequently an entrepreneurial team; a combination of people with different personality characteristics, knowledge and skills is likely to be more reliable in creating a successful enterprise process. These teams form over unspecified time periods, through four main stages (Vyakarnam et al., 2000). Initially the team spontaneously forms around a business idea or opportunity, where the entry to the team is guided by personal attraction, common interests, values and complementary skills. As the team grows and additional managers are recruited, an inner and outer team emerges, the former being loyal to the founders and the original vision of the business. The team then moves on to become more strategic and formal, and eventually as the business matures, loyalties shift away from the founders towards the overall business.

The time has come for entrepreneurship to be reconsidered, for the elevation of the team to the status of hero

Building a top management team could be the single most important step towards entrepreneurial management in a new venture

### **Team Demographics**

Although studies investigating new venture teams and new venture performance are limited, a number of studies have investigated the demographics of top management teams and subsequent firm performance in larger, more established organisations (Wagner et al., 1984; Wiersema and Bantel, 1992; Haleblian and Finkelstein, 1993; Smith et al., 1994; George and Chattopadhyay, 2002). Top teams with broad functional experience, multiple firm employment, and broader educational training outperformed those that did not, both within and across industries (Norburn and Birley, 1988). The mixture of backgrounds, knowledge, and skills known as demographic heterogeneity, as well as cognitive style influences a team's strategic choices and hence the organisation's performance (Hambrick and Mason, 1984). A study of the top management teams from 199 state chartered and national banks located in six Midwestern states, found that the more innovative banks were managed by more educated teams who were diverse with respect to their functional areas of expertise (Bantel and Jackson, 1989). These findings were also supported by Hitt and Tyler (1991) who determined that the extent of the influence of a management team's demographics was significant, both directly and as a moderator. In a small group, the addition of one person can increase team heterogeneity substantially (Bantel and Jackson, 1989). Thus team demography is indirectly related to subsequent performance through team processes (Smith et al., 1994). Of all the external influences of success, demographics are considered unambiguous and have the most predictable consequences (Drucker, 1985).

#### **Team Member Diversity**

While it appears quite clear that start-up team characteristics play a vital role in the ultimate success or failure of an entrepreneurial business ventures, we still know little about the dynamics associated with entrepreneurial team composition and development.

Most entrepreneurial teams consist of friends, relatives and/or associates from former employers or educational institutions, indicating that they emerge from existing relationships, often without consideration of members' capabilities to successfully launch a new business, indicating that team members are selected based on common interests and not on the unique *functional diversity* added by each team member (Chandler and Hanks, 1998). Therefore functional diversity is either developed by existing team members or acquired by hiring from outside. Three different conceptualisations of functional diversity (Bunderson and Sutcliffe, 2002) have been defined as:

- i. *dominant functional diversity* diversity in different functional areas within which team members have spent the greater part of their careers
- ii. *functional background diversity* diversity in the complex functional backgrounds of team members

Team demographics are indirectly related to subsequent performance through team processes

Most entrepreneurial teams consist of friends relations and/or associates from former employers or educational institutions iii. *functional assignment diversity* - diversity in team member functional assignments

Teams composed of functionally broad individuals will be better at sharing information than teams composed of functional specialists Teams composed of functionally broad individuals will be better at sharing information than teams composed of functional specialists, which has significant implications for team process and performance. Team members that do not contribute unique functional diversity tend to drop out of the team within the first few years. As a result individual team member's *team tenure* can cause considerable upheaval in the early years of the venture (Chandler and Hanks, 1998; Ucbasaran et al., 2001).

#### **Team Conflict and Cohesion**

Benefits gained through functionally diverse teams may be overridden by *affective conflict* which can result from such diversity (Amason, 1996). Affective conflict occurs when team members develop hard feelings towards each other in conflict situations, which result in poorer quality decisions and less acceptance of those decisions. Conversely the process of developing a shared understanding is the outcome of strategic decisions and the resulting *cognitive conflict* (Amason, 1996). Cognitive and effective conflict in TMTs are directly related to *shared cognition*, or thinking at a group level, and as a result both cognitive conflict and affective conflict are related to some dimension of organizational performance (Ensley and Pearce, 2001).

Strong team leaders create an environment where team members understand that conflict is beneficial (Hay, 2001). Teams that are able to take advantage of any conflict or disagreement by keeping it task focused and constructive should outperform those for whom the disagreement becomes personally focused and destructive (Ensley et al., 2002). Conversely dysfunctional group dynamics can lead to errors in judgment and flawed decisions. Janis (1982) highlighted the problems caused by *groupthink* due to pressures of conformity that arise within cohesive senior groups.

#### **Team Size**

The number of members in an start-up team is associated with the growth of start-ups (Doutriaux, 1992). Belbin's (1981) study of executive teams found that eight-man teams performed better than those larger or smaller. When teams are involved in high rates of activity, there is a danger that larger (10+ people) or medium-sized (4 people) teams become inefficient due to problems arising from coordinating its various parts. However, in a study of US high technology companies based in Ireland, Flood et al. (2001) found that top management team size ranged from two to eleven members, with an average of between five and six.

CEOs wanting to create a successful team will generally populate it with six to eight people (Hay, 2001). More members mean more competing interests, more personality clashes and a greater risk that competing factions will form. Clarysse and Moray (2001) suggested that in practice start-up teams from academic spin-offs with seven or more people are extremely difficult to work with and three to four people seem to be a far easier for the investor to deal with.

Strong team leaders create an environment where team members understand that conflict is beneficial

> Eight-man executive teams perform best

## Intellectual and Social Capital

Traditionally, economists have examined physical and human capital as key resources for the firm that facilitates productive and economic activity. However, knowledge has also been recognized as a valuable resource in the form of *intellectual capital*, which refers to the knowledge and knowing of an organization, intellectual community, or professional practice (Nahapiet and Ghoshal, 1998). Likewise *social capital*, the actual and potential resources individuals obtain from their relationships with others, has been recognized as a valuable resource. A high level of social capital, built on a favourable reputation, relevant previous experience, and direct personal contacts, often assist entrepreneurs in gaining access to venture capitalists, potential customers, and other stakeholders (Baron and Markman, 2000; Hoehn et al., 2002). Once such access is gained, the nature of the entrepreneurs' face-to-face interactions can strongly influence their success.

Four specific *social skills* have been identified (Baron and Markman, 2003) that may be contributed to entrepreneurial success:

- i. *social perception*: the ability to perceive accurately the emotions, traits, motivations of others.
- ii. *persuasion and social influence*: the ability to change others' attitudes and/or their behaviour in desired directions.
- iii. *social adaptability*: the ability to adapt to, or feel comfortable in, a wide range of social situations.
- iv. *impression management*: proficiency in a wide range of techniques for inducing positive reactions in others.

### **Personal Networks**

The *socially embedded ties* in personal networks also allow entrepreneurs to gain access to resources cheaper than they could normally be obtained on open markets (Birley, 1985; Dubini and Aldrich, 1991) They are also important for seed-stage investors who rely on recommendations from trusted sources (Shane and Cable, 2002). Witt (2004) found that both a) the size an entrepreneur's network and b) the time spent to maintain and enlarge the network, had a significantly positive correlation with their start-up's success. Witt also found that an entrepreneurial team's personal networks can have an added effect providing individual team member's direct contacts do not overlap, making more than one direct contact redundant. Thus in the long run, venture success will depend more on the network and networking activities of the whole entrepreneurial team, and later the whole organisation, than an individual entrepreneur.

Social ties can take the form of *direct ties*: a personal relationship between a decision maker and the party about whom a decision is being made (Shane and Cable, 2002), and *indirect ties*: where there is no direct link between two individuals, but through whom a connection can be made through a social network of each party's direct ties (Burt, 1987 in Shane and Cable, 2002).

Seed-stage investors rely on recommendations from trusted sources

Social Capital often assists

venture capital

entrepreneurs in giving access to

## **Investment Decision Framework**

This preceding literature review has considered the academic literature on growth entrepreneurship, along with aspects of Venture Capitalists' assessment during their investment decision making process, a process which is also closely followed by Business Angels. Listing each of the variables found to influence venture potential (see Figure 5) illustrates the prospect of a high degree of complexity in the interaction between these variables.

## Figure 5. A Framework of VC/BA Investment Decision Criterion based on academic studies



# **Chapter 3: Summary and Discussion**

This chapter summarises the findings of the literature review and includes discussion on the nature of the perceived equity gap faced by early stage ventures and the potential impact that emotional intelligence can have on success. More research is also called for to gain a clearer understanding of whether entrepreneurs are born or made.

Much emphasis is placed on the importance of entrepreneurial teams during the investment decision process (Hall and Hofer, 1993; Shepherd and Zacharakis, 2002), and yet limited research apart from team demographics (Roure and Keeley, 1990; Stuart and Abetti, 1990; Cooper et al., 1994; Chandler and Lyon, 2001) has been conducted in this area. This has resulted in a limited understanding of the characteristics of different types of entrepreneurs, and in particular the drivers of success for high-growth ventures. Consequently when assessing new business proposals, VCs and business angels rely on their own implicit theories on what a potentially successful business should possess (Hernan and Watson, 2002).

The use of VCs' "espoused" criteria may be a very poor basis for either understanding actual decision criteria or building guidelines and systems for improving performance in investment decision making (Mainprize et al., 2003). Surprisingly despite the potential benefits of improved decision learning, VCs rarely use decision aids and thus may be missing an opportunity (Shepherd and Zacharakis, 2002). Although VCs minimize risk by investing in a portfolio of businesses, the inherent risks in venture capital funding are still very high with a total of 40-55% of VCFs portfolio companies either failing or achieving no more than breakeven (Laurie, 2001).

## The Equity Gap

Recent surveys have challenged the earlier findings of the HM Treasury Report (2003) which highlighted an 'Equity Gap' between £250,000 and £1m. Library House (2006) found that this phenomenon was only partially related to the level of funding available and more reflective of the fact that the majority of companies seeking funding simply do not have the potential required to warrant investment by an investor motivated by financial gain. However, a more recent article in The Economist (September, 2006) reported that British entrepreneurs struggle to find well organised investors if they are looking for less than £2m-3m. In the same article a 'secondary equity gap' was also reported as emerging in America as loose networks of angel investors are beginning to codify the terms on which they can work together and start to behave more like venture capital firms.

VCs rarely use decision aids and thus may be missing an opportunity

The majority of companies seeking funding do not have the potential required to warrant investment

### **Emerging links to Entrepreneurial Orientation**

Although the literature suggests that the management team is important and often ranked the most important criteria (Zacharakis and Meyer, 2000), others have placed higher importance on industry-related competence and educational capability or key success factors of stability, timing of entry, lead time or competitive rivalry (Shepherd, 1999). However, care should be taken when considering industry-related competence and educational capability as primary factors for investment decision making purposes as studies have shown that an individual's IQ and management skills are less important than their *emotional intelligence* (Goleman, 1996; Fernandez-Araoz, 1999,2001; Higgs and Dulewicz, 2002) (see Figure 6).

#### **Emotional Intelligence**

Goleman (1998), a leading authority on this new construct, defines emotional intelligence (EI) as one's ability to perceive, assess, and manage the emotions of one's self, of others, and of groups. When considering the impact of EI on team performance, Druskat and Wolff (2001) determined that group emotional intelligence provided the ability of a group to generate a shared set of norms that manage the emotional process in a way that builds trust, group identity, and group efficacy. These factors in turn were found to create cohesion and group satisfaction, which are considered by entrepreneurship researchers to be important influences of entrepreneurial team success (Amason, 1996; Ensley and Pearce, 2001; Ensley et al., 2002). The importance of these social skills in raising capital and creating successful new ventures is only now becoming better understood (Hoehn et al., 2002; Baron and Markman, 2003), and already this avenue of research has led to the suggestion that "the entrepreneur of the 21st century may well be defined by emotional intelligence" (Cross and Travaglione, 2003).

## Figure 6. The Impact of Emotional Intelligence on Success



An individual's IQ and management skills are less important than their emotional intelligence

The entrepreneur of the 21<sup>st</sup>

emotional intelligence

Century may well be defined by

Intermezzo Ventures: John Cavill, 2007



#### Trade-Offs in Relation to Success & Failure

#### **Dyslexia**

Two new avenues of entrepreneurship research are also worth mentioning. The first avenue has shown that many individuals who have not performed well during their early education due to developmental dyslexia, go on to become successful entrepreneurs (Logan, 2002). This phenomenon has been clearly demonstrated by the likes of Sir Richard Branson, Sir Alan Sugar and Dame Anita Roddick, who are all reported to be dyslexic (Brightstar, 2004). Logan found that the incidence of dyslexia in entrepreneurs was more than four times higher than that in the corporate manager population. This is due in part to dyslexic's higher degree of creativity, increased need for achievement and enhanced communication skills. The full extent of dyslexia among the general population is still being discovered, but it is reported to be between four and ten percent, dependant on its severity (Harris and Ross, 2005). Public opinion of this condition, which is classed as a 'learning disability', may well need to be reassessed as a 'gift' to nascent entrepreneurs that potential investors should become more aware of.

#### **Biological Factors**

The second new avenue of exploratory research has set out to understand more fully the long running *nature versus nurture* debate on whether entrepreneurs are born or can be taught the appropriate skills. The high growth in entrepreneurship education over recent years in schools, further education colleges and universities would suggest the latter. However, a U.K. exploratory study (Nicolaou et al., 2006), which compared the selfemployment activity of 609 pairs of identical twins and 657 pairs of same sex non-identical twins, found that identical twins had a much higher incidence of self-employment activity. This seems to suggest a genetic link to entrepreneurial orientation, although the specific genes have yet to be identified.

Entrepreneurs are more than four times more likely to be dyslexic than corporate managers

Source: Fernandez-Araoz (2001)

# Entrepreneurs have high testosterone

A second exploratory study on the same theme based on evolutionary biology (White et al., Forthcoming) found the level of testosterone in individuals with entrepreneurial experience to be measurably higher than those with no entrepreneurial experience, suggesting a possible link between testosterone and venture success.

Should this line of exploratory research prove fruitful, what might be the potential implications for private or institutional investors wanting to incorporate tests of this nature within their investment due diligence process? Would it be socially acceptable to deny someone access to financial resources based upon biological factors that they can not control?

## **The Need for Further Research**

This literature review has highlighted the complex nature of assessing new venture potential and in particular the assessment of entrepreneurial capital. Ensley et al (2002) suggested that "new venture TMTs are an important subject to study" and Shepherd and Zacharakis (2002) expressed their hope that "more research will be conducted on the important field of decision aids applied to the VC context". A more recent studies continue to support the call for future research in the VC decision-making field that will "seek to indicate guidelines which, if consistently applied, might enable a range of analysis to produce the same "invest" or "don't invest" decisions based on known venture attributes" (Mainprize et al., 2003), in which the entrepreneurial team has a significant influence. While Vyakarnam and Handelberg (2005) suggest that more fine-grained variables concerning team and individual processes have to be taken into account in order to better understand the link between entrepreneurial teams and organisational performance.

This clearly suggest a need to determine more fully the relative importance of each investment criterion adopted, along with a further understanding of what combination of competences might be prevalent in 'blockbuster' investments, so that they can be used as a benchmark for entrepreneurial teams seeking to raise equity finance for new growth ventures. Mainprize et al. (2002) determined that "If a new venture is to succeed, the attributes required at or near the time that it is founded will vary little over its life". This seems to suggest that detecting the presence of attributes known to enhance venture success becomes critical to predicting the performance of a new venture.

## **Entrepreneurship in South East England**

The UK venture capital industry is highly concentrated in London and consequently the majority of investment activity has historically been made in London (26%) followed by the South East with (18%) and the remaining regions with significantly lower activity (2-10%) (see Table 3). To help put this in perspective; London leads both the UK and Europe in early stage technology investment. London also has, by a considerable margin, the largest cluster of venture capital backed companies outside the United States; where Silicon Valley attracts approximately ten times more venture capital investment (g2i, 2006).

New Venture top management teams are an important subject to study

Silicon Valley attracts approximately fifteen times more venture capital investment than South East England Although statistics are readily available on formal venture capital investments, on the whole informal venture capital investments go unrecorded. This is primarily due to the difficulties in identifying business angels and their desire for privacy. Anecdotal information suggests that what information is available is somewhat fragmented as many informal investors invest outside the RDA region where they are located.

### Table 4. Distribution of Companies and Investment by Region

UK Region	Venture-backed Companies	Companies per m People	Institutional Investment (£m)	Avg. per Company (£m)
London	380 (26%)	52.9	2,139 (36%)	5.6
South East	262 (18%)	32.7	1283 (22%)	4.9
East of England	148 (10%)	27.4	733 (12%)	5.0
Scotland	142 (10%)	54.0	453 (8%)	3.2
North West	114 (8%)	16.9	198 (3%)	1.7
West Midlands	96 (7%)	18.2	305 (5%)	3.2
South West	70 (5%)	14.2	337 (6%)	4.8
Yorkshire and The Humber	64 (4%)	12.9	136 (2%)	2.1
East Midlands	51 (4%)	12.2	133 (2%)	2.6
Wales	48 (3%)	16.52	88 (1%)	1.8
Northern Ireland	33 (2%)	11.5	47 (1%)	1.4
North East	29 (2%)	19.5	52 (1%)	1.8
Total	1,437 (100%)	25.5	5,903 (100%)	4.1

Source: Library House (2006)

### **GEM Reports**

The main reference for entrepreneurial activity is the annual Global Entrepreneurship Monitor (GEM) Report, which calculates the *Total Entrepreneurial Activity* (TEA) rate for each of the 44 participating countries. Separate more detailed reports are also available for each participating countries (see www.gemconsortium.org). The TEA rate represents the share of working and adult-age individuals (18-64 years old) who are either actively trying to start new entrepreneurial companies, or who are currently acting as owner-managers of new entrepreneurial businesses.

GEMs TEA rate indicates the country-level prevalence of both *nascent* entrepreneurs and baby business managers in the working population, regardless of the ambition level of the new venture. However, the objective of this discussion paper is to focus on the characteristics of high-growth entrepreneurship, which is the focus of a special report (GEM, 2005) where to following definitions are used.

- *Higb-Expectation Nascent Entrepreneur* is an individual who expects to employ at least 20 employees within five years time through his/her own firm
- *High-Expectation Baby Businesses* is a new firm, up to 42 months old, that aims to employ at least 20 employees within five years time

It is important to note that the GEM term "High-Expectation" is based on expected, rather than realised job creation, and not all expectations are materialised. However, growth aspirations have been shown to be a good predictor of eventual growth (Davidsson et al., 1998).

Overall only 2.7% of the adult-age population (18-64 year olds) from countries surveyed expected to have five or more employees. For those with growth expectations of 10+, 20+ and 50+ employees, the percentages drop to 1.6%, 0.8% and 0.4 % respectively. The USA and Canada has the highest prevalence of high-growth potential entrepreneurial activity with 1.5% participation, followed by the U.K and Ireland with 1.4% participation, which is significantly higher than other EU countries (GEM, 2005).

## Conclusions

High-expectation entrepreneurial activity is rear. Depending on world region and country, only approximately 1.5% or less of the adult population (18-64 year olds) is involved with nascent or baby businesses that expect to employ 20 or more employees in five years' time. These statistics show that that the majority of all new firms grow at very modest rates or not at all, with less that 10% of all nascent entrepreneurial activity characterised as having high-expectation start-up activity. As a result the distribution of job creation activities is quite biased, as those expecting to create 50 or more jobs represent only 5.3% of the population of nascent entrepreneurs and promise to create as much as 65.5% of all new jobs.

The GEM Report on High-Expectation Entrepreneurship (GEM, 2005) suggests that governments should be aware of the importance of high-expectation and high-potential entrepreneurial activity and consider introducing highly selective support measures and policies as these measures could prove more effective for job creation purposes that non-selective ones.

• Recognise the importance of high-expectation and high potential entrepreneurial activity and adjust policy priorities accordingly

The majority of all new firms grow at very modest rates or not at all

- Introduce an element of selectiveness in entrepreneurship policy, to account for uneven contributions by different types of entrepreneurial activity to both wealth and job creation
- Develop sophisticated support measures to deal with the specific support needs of high-expectation entrepreneurial ventures

Having extensively reviewed the literature on growth entrepreneurship in this discussion paper these recommendations appear to be well supported. However, this task should not be underestimated. A Canadian study into the question of how governments can support rapid-growth firms most effectively (Fisher and Reuber, 2003) was found to be a difficult one to resolve because of the lack of clear prescriptions for rapid growth. However, the study did suggest that owners of rapid-growth companies are most comfortable learning and obtaining advice from their peers (owners of other rapid-growth companies) but they may not have the opportunity to develop effective peer networks.

A special bread of advisor, known as *Mentor Capitalists*, has emerged in America (Leonard and Swap, 2000) which may help satisfy this perceived need. These business coaches, typically with entrepreneurial backgrounds in successful high growth companies, help young and inexperienced entrepreneurs create and refine a business model, find top talent, build business processes, test their ideas in the marketplace, and attract funding. Most mentor capitalists are given equity for their help and support, and many invest small amounts of their own money at a very early stage. Interestingly mentoring and brokering of mentors was considered to be the most critical thing that government could provide (Fisher and Reuber, 2003), which is one of a number of services already being provided to growth entrepreneurs in SEEDA's Enterprise Hub Network.

Finally, the central themes arising from each of the key topics covered by this discussion paper highlight the need for targeted educational programmes for formal and informal investors, those seeking investment, as well as their business advisors. Not just in understand and being prepared for the investment process, but also enabling all stakeholders to better understand what human capital factors drive new venture success, and where necessary developing those skills.

#### There is a lack of clear prescription for rapid-growth firms

Mentoring and mentoring brokering is the most critical thing that government can provide

## References

Amason, A. C. (1996). Distinguishing the Effects of Functional and Dysfunctional Conflict on Strategic Decision Making: Resolving a Paradox for Top Management Teams, *Academy of Management Journal*, 39, (1) pp 123-148.

Arkebauer, J. B. (1993). Ultrapreneuring: taking a venture from start-up to harvest in three years or less. New York: McGraw-Hill.

Bachher, J. S. and Guild, P. D. (1996). Financing Early Stage Technology Based Companies: Investment Criteria used by Investors. Frontiers of Entrepreneurship Research. Available from: <u>http://www.babson.edu/entrep/fer/papers96/</u>

Bantel, K. A. and Jackson, S. E. (1989). Top Management and Innovation in Banking: Does the Composition of the Top Team Make a Difference?, *Strategic Management Journal*, 10, pp 107-112.

Baron, R. A. and Markman, G. D. (2000). Beyond Social Capital: How social skills can enhance entrepreneurs' success, *Academy of Management Executive*, 14, (1) pp 106-117.

Baron, R. A. and Markman, G. D. (2003). Beyond Social Capital: the role of entrepreneurs' social competence in there financial success, *Journal of Business Venturing*, 18, pp 41-60.

Begley, T. M. and Boyd, D. P. (1987). Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Small Businesses, *Journal of Business Venturing*, 2, pp 79-93.

Belbin, R. M. (1981). *Management Teams: Why They Succeed or Fail*. Oxford: Butterworth-Heinemann.

Birley, S. (1985). The role of networks in the entrepreneurial process, *Journal of Business Venturing*, 1, pp 107-117.

Birley, S. and Westhead, P. (1993). A Comparison of New Businesses Established by 'Novice' and 'Habitual' Founders in Great Britain, *International Small Business Journal*, 12, pp 38-60.

Bolton, B. and Thompson, J. (2004). *Entrepreneurs: Talent, Temperament; Technique*.2nd Ed. Oxford: Elsevier Butterworth-Heinemann.

Bunderson, J. S. and Sutcliffe, K. M. (2002). Comparing Alternative Conceptualizations of Functional Diversity in Management Teams: Process and Performance Effects, *Academy of Management Journal*, 45, (5) pp 875-893.

BVCA (2004). *A Guide to Private Equity*. London: British Venture Capital Association. Available from:

http://www.bvca.co.uk/publications/guide/intro.html

Bygrave, W. D. (1998). Building an entrepreneurial economy: Lessons from the United States, *Business Strategy Review*, 9, (2) pp 11-19.

Carland, J. W. and Carland, J. C. (1997). Entrepreneurship: An American Dream, *Journal of Business and Entrepreneurship*, 9, (1) pp 33-46.

Case, J. (1996). The Age of the Gazelle, Inc. Magazine, 15 May 1996, (44) pp.

Chandler, G. N. and Jansen, E. (1992). The Founder's Self-Assessed Competence and Venture Performance, *Journal of Business Venturing*, 7, (3) pp 223-236.

Chandler, G. N. and Hanks, S. H. (1993). Measuring the Performance of Emerging Businesses: A Validation Study, *Journal of Business Venturing*, 8, pp 391-408.

Chandler, G. N. and Hanks, S. H. (1998). An Investigation of New Venture Teams in Emerging Businesses. Frontiers of Entrepreneurship Research. Available from: http://www.babson.edu/entrep/fer/papers98/index98/index98.html Do we really understand the drivers of new venture success?

- Chandler, G. N. and Lyon, D. W. (2001). Issues of research design and construct measurement in entrepreneurship research: The past decade, *Entrepreneurship Theory and Practice*, 25, (4) pp 101-113.
- Chrisman, J. J., Bauerschmidt, A. and Hofer, C. W. (1998). The Determinants of New Venture Performance: An Extended Model, *Entrepreneurship Theory and Practice*, (Fall) pp 5-29.
- Ciavarella, M. A., Buchholtz, A. K., Riordan, C. M., Gatewood, R. D. and Stokes, G. S. (2004). The Big Five and venture survival: Is there a linkage?, *Journal of Business Venturing*, 19, pp 465-483.
- Clarysse, B. and Moray, N. (2001). A process study of entrepreneurial team formation: The case for a research based spin off. Working Paper 2001/115. Gent: Gent University.
- Cooper, A. C. (1971). *The Founding of Technological Based Firms*. Milwaukee: Centre for Venture Management.
- Cooper, A. C., Gimeno-Gascon, F. J. and Woo, C. Y. (1994). Initial Human and Financial Capital as Predictors of New Venture Performance, *Journal of Business Venturing*, 9, pp 371-395.
- Costa, P. T. and McCrae, R. R. (1997). Stability and Change in Personality Assessment: The Revised NEO Personality Inventory in the Year 2000, *Journal* of Personality Assessment, 68, (1) pp 86-94.
- Cross, B. and Travaglione, A. (2003). The Untold Story: is the entrepreneur of the 21st century defined by emotional intelligence?, *International Journal of Organizational Analysis*, 11, (3) pp 221-228.
- Cuevas, J. G. (1993/94). Towards a Taxonomy of Entrepreneurial Theories, International Small Business Journal, 12, (4) pp 77-88.
- Davidsson, P., Linsmark, L. and Olofsson, C. (1998). Small business job creation: A comment, *Small Business Economics*, 8, (4) pp 317-322.
- Doutriaux, J. (1992). Emerging High-Tech Firms: How durable are their competitive start-up advantages?, *Journal of Business Venturing*, 7, pp 303-322.
- Drucker, P. F. (1985). *Innovation and Entrepreneurship*. Oxford: Butterworth Heinemann.
- Druskat, V. U. and Wolff, S. B. (2001). Group Emotional Intelligence and its Influence on Group Effectiveness. In *The Emotionally Intelligent Workplace*, (Eds, Cherniss, C. and Goleman, D.) San Francisco: Jossey-Bass, pp. 132-155.
- Dubini, P. and Aldrich, H. E. (1991). Personal and extended networks are central to the entrepreneurial process, *Journal of Business Venturing*, 6, pp 305-313.
- Economist (2006). Giving ideas wings, The Economist, (September 16th) pp 93-95.
- Ensley, M. D. and Pearce, C. L. (2001). Shared cognition in top management teams: implications of new venture performance, *Journal of Organizational Behaviour*, (22) pp 145-160.
- Ensley, M. D., Carland, J. W. and Carland, J. C. (2000). Investigating the Existance of the Lead Entrepreneur, *Journal of Small Business Management*, (October) pp 59-77.
- Ensley, M. D., Pearson, A. W. and Amason, A. C. (2002). Understanding the dynamics of new venture top management teams; Cohesion, conflict, and new venture performance, *Journal of Business Venturing*, 17, pp 365-386.
- Erikson, T. and Nerdrum, L. (2001). New venture management valuation: assessing complementary capacities by human capital theory, *Venture Capital*, 3, (4) pp 277-291.
- European Commission (2002). Benchmarking Business Angels. European Commission.
- Feeney, L., Haines, G. and Riding, A. (1999). Private investors' investment criteria: insights from qualative data, *Venture Capital*, 1, (2) pp 121-145.
- Fernandez-Araoz, C. (1999). Hiring without Firing, Harvard Business Review, (July-August) pp 109-120.
- Fernandez-Araoz, C. (2001). The Challenge of hiring senior executives. In *The emotionally intelligent workplace*, (Eds, Cherniss, C. and Goleman, D.) San Francisco: Jossey-Bass, pp. 13-26.

Do we really understand the drivers of new venture success?

- Fisher, E. and Reuber, R. (2003). Support for Rapid-Growth Firms: Government Policymakers, and Private Sector Resource Providers, *Journal of Small Business Management*, 41, (4) pp 346-365.
- Flood, P. C., MacCurtain, S. and West, M. A. (2001). *Effective Top Management Teams: An International Perspective*. Los Angeles: Blackhall.
- Fried, V. H. and Hisrich, R. D. (1994). Towards a Model of Venture Capital Investment Decision Making, *Financial Management*, 23, (3) pp 28-37.
- Fried, V. H., Hisrich, R. D. and Polonchek, A. (1993). Venture Capitalists' Investment Criteria: A Replication, *Journal of Small Business Finance*, 3, (1) pp 37-42.
- g2i (2006). London: Anchoring European Technology Investment. London: gateway2investment. Available from: www.g2i.org
- Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship?, *Journal of Business Venturing*, (5) pp 15-28.
- GEM (2005). Report on High-Expectation Entrepreneurship. London: London Business School. Available from: <u>www.gemconsortium.org/download/</u>
- George, E. and Chattopadhyay, P. (2002). Do Differences Matter? Understanding Demography-Related Effects in Organisations, *Australian Journal of Management*, 27, (Special Issue) pp 47-55.
- Goleman, D. (1996). *Emotional Intelligence Why can it matter more than IQ?* London: Bloomsbury.
- Goleman, D. (1998). Working with Emotional Intelligence. London: Bloomsbury.
- Golis, C. C. (1998). Enterprise and Venture Capital. 3rd ed. Australia: Allen Unwin.
- Haleblian, J. and Finkelstein, S. (1993). Top Management Team Size, CEO Dominance, and Firm Performance: The Moderating Roles of Environmental Turbulence and Discretion, *Academy of Management Journal*, 36, (4) pp 844-863.
- Hall, J. and Hofer, C. W. (1993). Venture Capitalists' Decision Criteria in New Venture Evaluation, *Journal of Business Venturing*, 8, pp 25-42.
- Hambrick, D. C. and Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of its Top Managers, *Academy of Management Review*, 9, (2) pp 193-206.
- Harris, A. and Ross, C. (2005). Dyslexia in the workplace, *Occupational Health*, 57, (3) pp 25-32.
- Harrison, R. and Mason, C. (2000). Venture capital market complementaries: the links between business angels and venture capital funds in the United Kingdom, *Venture Capital*, 2, (3) pp 223-242.
- Hay (2001). What makes a great entrepreneur? Philadelphia: Hay Group.
- Hernan, R. and Watson, J. (2002). Do Venture Capitalists' Implicit Theories on New Business Success/Failure have Empirical Validity?, *International Small Business Journal*, 20, (4) pp 395-421.
- Herron, L. and Robinson, R. B. (1993). A Structural Model of the Effects of Entrepreneurial Characteristics on Venture Performance, *Journal of Business Venturing*, 8, pp 281-294.
- Higgs, M. and Dulewicz, V. (2002). *Making Sense of Emotional Intelligence*. 2nd ed. Chiswick: ASE.
- Hisrich, R. D. and Jankowicz, A. D. (1990). Intuition in Venture Capital Decisions: An Exploratory Study Using a New Technique, *Journal of Business Venturing*, 5, (1) pp.
- Hitt, M. A. and Tyler, B. B. (1991). Strategic Decision Models: Integrating Different Perspectives, *Strategic Management Journal*, 12, (5) pp.
- HM Treasury/Small Business Service (2003). Bridging the finance gap: a consoltation on improving access to growth capital for small businesses. Norwich: HMSO.
- HMTreasury (2003). Bridging the finance gap: next steps in improving access the type of the capital for small business. London: HM Treasury. Available from: www.hm-treasury.gov.uk
- Hoehn, M. N., Brush, C. G., Baron, R. A. and McIndoe, C. (2002). Show me the money! Assessments of entrepreneurial social competence from two perspectives. Frontiers of Entrepreneurship Research. Available from: http://www.babson.edu/entrep/fer/Babson2002/TOC/TOC.html

#### **GROWTH ENTREPRENEURSHIP:**

Do we really understand the drivers of new venture success?

- Hofer, C. W. and Sandberg, W. R. (1987). Improving New Venture Performance: Some Guidelines for Success., *American Journal of Small Business*, 12, (1) pp 11-15.
- Hollenbeck, J. R. and Whitener, E. M. (1998). Reclaiming Personality Traits for Personnel Selection: Self-Esteem as an Illustrative Case., *Journal of Management*, 14, (1) pp.
- Hull, D. L., Bosley, J. J. and Udell, G. G. (1980). Renewing the Hunt for the Heffalump: Identifying Potential Entrepreneurs by Personality Characteristics, *Journal of Small Business Management*, 18, (1) pp 11-18.
- Janis, I. L. (1982). Groupthink: Psychological Studies of Policy Decisions and Fiascos. 2nd ed. Houghton Mifflin.
- Jones-Evans, D. (1995). A typology of technology-based entrepreneurs, International Journal of Entrepreneurial Behaviour & Research, 1, (1) pp 26-47.
- Khan, A. M. (1986). Entrepreneur Characteristics and Prediction of New Venture Success, OMEGA International Journal of Management Science, 14, (5) pp 356-372.
- Kjeldsen, J. and Nielson, K. (2000). *The Circumstances of Women Entrepeneurs*. The Danish Agency for Trade and Industry.
- Laurie, D. L. (2001). Venture Catalyst. London: Nicholas Brealey.
- Leonard, D. and Swap, W. (2000). Gurus in the Garage, Harvard Business Review, (November-December) pp 71-82.
- Logan, J. (2002) In *The 2002 Small Business and Entrepreneurship Development* ConferenceNottingham.
- Lorrain, J. and Dussault, L. (1988). *Relation Between Psychological Characteristics, Administrative Behaviours and Success of Founder Entrepreneurs at the Start-Up Stage.* Frontiers of Entrepreneurship Research. Available from: <u>http://www.babson.edu/entrep/fer/front\_88.html</u>
- Lumpkin, G. T. and Dess, G. G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance, *Academy of Management Review*, 21, (1) pp 135-172.
- MacMillan, I. C., Siegel, R. and Subba-Narashima, P. N. (1985). Criteria Used by Venture Capitalists to Evaluate New Venture Proposals, *Journal of Business Venturing*, 1, pp 119-128.
- MacMillan, I. C., Zemann, L. and Subba-Narashima, P. N. (1987). Criteria Distinguishing Successful from Unsuccessful Ventures in the Venture Screening Process, *Journal of Business Venturing*, 2, (2) pp 123-137.
- Mainprize, B., Hindle, K., Smith, B. and Mitchell, R. (2002). Toward the standardization of venture capital investment evaluation: Discussion criteria for rating investee business plans. Frontiers of Entrepreneurship Research. Available from: http://www.babson.edu/entrep/fer/Babson2002/TOC/TOC.html
- Mainprize, B., Hindle, K., Smith, B. and Mitchell, R. (2003). Caprice Versus Standardization in Venture Capital Decision Making, *The Journal of Private Equity*, (Winter) pp 15-25.
- Manigart, S., Baeyens, K. and van Hyfte, W. (2002). The survival of venture capital backed companies, *Venture Capital*, 4, (2) pp 103-124.
- Mason, C. (2006a). Informal Sources of Venture Finance. In *The Life Cycle of Entrepreneurial Ventures*, Vol. 3. International Handbook on Entrepreneurship (Ed, Parker, S.): Kluwer, pp.
- Mason, C. (2006b). Informal Sources of Venture Finance. In *The Life Cycle of Entrepreneurial Ventures*, Vol. 3. International Handbook of Entrepreneurship (Ed, Park, S.): Kluwer, pp. 603.
- Mason, C. and Harrison, R. (1996). Why "Business Angels' Say No: A Case Study of Opportunities Rejected by an Informal Investor Syndicate, *International Small Business Journal*, 14, (2) pp 35-51.
- Mason, C. and Harrison, R. (2000). Informal Venture Capital and the Financing of Emergent Growth Businesses. In *The Blackwell Handbook of Entrepreneurship*, (Eds, Sexton, D. L. and Landstrom, H.) Oxford: Blackwell, pp. 221-239.

Do we really understand the drivers of new venture success?

- Mason, C. and Stark, M. (2004). What do Investors Look for in a Business Plan? A Comparison of the Investment Criteria of Bankers, Venture Capitalists and Business Angels, *International Small Business Journal*, 22, (3) pp 227-248.
- Mavrinac, S. C. and Siesfeld, T. (1998). Measures that Matter: An Exploratory Investigation of Investor Information Needs and Value Priorities. In *Enterprise* Value in the Knowledge Economy: Measuring Performance in the Age of Intangibles: Ernst & Young LLP, pp.
- McGrath, L. C. (2002). Growth, Bullfrogs, and Small Businesses, *The Coastal Business Journal*, 1, (1) pp 52-56.

Minor, J. B. (1996). Evidence for the Existence of a set of Personality Types, Defined by *Psychological Tests, that Predict Entrepreneurial Success.* Frontiers of Entrepreneurship Research. Available from:

http://www.babson.edu/entrep/fer/papers96/

Mitton, D. G. (1989). The Complete Entrepreneur, *Entrepreneurship Theory and Practice*, (Spring) pp 9-19.

Nahapiet, J. and Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage, *Academy of Management Review*, 23, (2) pp 242-267.

Nicolaou, N., Shane, S., Cherkas, L., Hunkin, J. and Spector, T. D. (2006). Is the tendancy to engage in self-employment genetic?, pp.

Norburn, D. and Birley, S. (1988). The Top Management Team and Corporate Performance, *Strategic Management Journal*, 9, (3) pp 225-238.

- Perry, C. (1990). After Further Sightings of the Heffalump, *Journal of Managerial Psychology*, 5, (2) pp 22-32.
- Reich, R. B. (1987). Entrepreneurship reconsidered: The team as a hero, *Harvard Business Review*, (May-June) pp 77-84.
- Ronstadt, R. C. (1984). *Entrepreneurship: Text, Cases and Notes.* Dover, MA: Lord Publishing.
- Roure, J. B. and Keeley, R. H. (1990). Predictors of Success in New Technology Based Ventures, *Journal of Business Venturing*, 5, pp 201-220.
- Ruhnka, J., Feldman, H. D. and Dean, T. J. (1992). The "Living Dead" Phenomenon in Venture Capital Investments, *Journal of Business Venturing*, 7, pp 137-155.
- Sandberg, W. R. (1992). Strategic management's potential contributions to a theory of entrepreneurship, *Entrepreneurship Theory and Practice*, 16, (3) pp 73-91.
- Sandberg, W. R. and Hofer, C. W. (1987). Improving New Venture Performance: the role of Strategy, Industry Structure, and the Entrepreneur, *Journal of Business Venturing*, 2, pp 5-28.
- Schultz, T. W. (1961). Investment in Human Capital, *The American Economic Review*, 51, (1) pp 1-17.
- Shane, S. and Cable, D. (2002). Networking Ties, Reputation, and the Financing of New Ventures, *Management Science*, 48, (3) pp 364-381.
- Shepherd, D. (1999). Venture Capitalists' Assessment of New Venture Survival, Management Science, 45, (5) pp 621-632.
- Shepherd, D. and Zacharakis, A. (2002). Venture capitalists' expertise: A call for research into decision aids and cognitive feedback, *Journal of Business Venturing*, 17, pp 1-20.
- SJ Berwin (2003). The Human Capital Equation. London: SJ Berwin.
- Smart, G. H. (1999a). Management Assessment Methods in Venture Capital: Towards a Theory of Human Capital Valuation, *Journal of Private Equity*, 2, (3) pp 29-46.
- Smart, G. H. (1999b). Management Assessment Methods in Venture Capital: An Empirical Analysis of Human Capital Valuation, *Venture Capital*, 1, (1) pp 59-82.
- Smith, K. G., Smith, K. A., Olian, J. D., Sims, H. P., O'Bannon, D. P. and Scully, J. A. (1994). Top Management Team Demography and Process: The Role of Social Integration and Communication, *Administrative Science Quarterly*, 39, pp 412-438.
- Stuart, R. W. and Abetti, P. A. (1987). Start-up Ventures: Towards the Prediction of Initial Success, *Journal of Business Venturing*, 2, pp 215-203.

- Stuart, R. W. and Abetti, P. A. (1990). Impact of Entrepreneurial and Management Experience on Early Performance, *Journal of Business Venturing*, 5, pp 151-162.
- Timmons, J. A. and Spinelli, S. (2003). New Venture Creation: Entrepreneurship for the 21st Century. 6th. Singapore: McGraw Hill.
- Tyebjee, T. T. and Bruno, A. V. (1984). A model of venture capitalist investment activity, *Management Science*, 30, (9) pp 1051-1066.
- Ucbasaran, D., Westhead, P., Wright, M., Lockett, A. and Lei, A. (2001). *The Dynamics of Entrepreneurial Teams*. Frontiers of Entrepreneurship Research. Available from:

http://www.babson.edu/entrep/fer/Babson2001/TOC/TOC.html

- Urbas, D. (2002). Programs to Encourage Venture Capital Activity: Selected Country Studies. Virginia: U.S Civilian Research and Development Foundation.
- Utsch, A., Rauch, A., Rothfuss, R. and Frese, M. (1999). Who Becomes a Small Scale Entrepreneur in a Post-Socialist Environment: On the Differences between Entrepreneurs and Managers in East Germany, *Journal of Small Business Management*, 37, (3) pp 31-42.
- van Osnabrugge, M. (2000). A comparison of business angel and venture capitalist investment procedures: an agency theory-based analysis, *Venture Capital*, 2, (2) pp 91-109.
- Vyakarnam, S. and Handelberg, J. (2005). Four Themes of the Impact of Management Teams on Organisational Performance, *International Small Business Journal*, 23, (3) pp 236-256.
- Vyakarnam, S., Jacobs, R. C. and Handelberg, J. (2000). Formation and Development of Entrepreneurial Teams in Rapid Growth Businesses. Frontiers of Entrepreneurship Research. Available from:

http://www.babson.edu/entrep/fer/TOC/TOC.html

- Wagner, W. G., Pfeffer, J. and O'Reilly, C. A. (1984). Organizational Demography and Turnover in Top-Management Groups, *Administrative Science Quarterly*, 29, pp 74-92.
- Westhead, P. and Wright, M. (1997). Novice, Portfolio and Serial Founders: Are they different? Frontiers of Entrepreneurship Research. Available from: http://www.babson.edu/entrep/fer/papers97/index97.htm
- White, R. E., Thornhill, S. and Hampson, E. (Forthcoming). *Entrepreneurs and Evolutionary Biology: the relationship between testosterone and new venture creation.* London, Canada: University of Western Ontario.
- Wiersema, M. F. and Bantel, K. A. (1992). Top Management Team Demography and Corporate Strategic Change, *Academy of Management Journal*, 35, (1) pp 91-121.
- Witt, P. (2004). Entrepreneurs' networks and the success of start-ups, *Entrepreneurship and Regional Development*, (Septemebr) pp 391-412.
- Wright, M., Robbie, K. and Albringhton, M. (2000). Secondary management buy-outs and buy-ins, *International Journal of Entrepreneurial Behaviour & Research*, 6, (1) pp.
- Yli-Renko, H. and Hay, M. (1999). The Major European Venture Capital Markets. In *The Venture Capital Handbook*, (Eds, Bygrave, W. D., Hay, M. and Peeters, J. B.) Harlow: Pearson Education, pp. 23-77.
- Zacharakis, A. and Meyer, D. G. (1996). Do Venture Capitalists really understand their own Decision Process?: A Social Judgement Theory Perspective. Frontiers of Entrepreneurship Research. Available from:

http://www.babson.edu/entrep/fer/papers96/index.html

- Zacharakis, A. and Meyer, D. G. (2000). The potential of actuarial decision models: can they improve the venture capital investment decision?, *Journal of Business Venturing*, 15, pp 323-346.
- Zacharakis, A. and Shepherd, D. (2001). The Nature of Information and Overconfidence on Venture Capitalists' Decision Making, *Journal of Business Venturing*, 16, pp 311-332.

#### **GROWTH ENTREPRENEURSHIP:** Do we really understand the drivers of new venture success?

Zider, R. (1998). How Venture Capital Works, *Harvard Business Review*, (Nov-Dec) pp 131 140.



SEEDA Enterprise Hub Network Cross Lane, Guildford Surrey GU1 1YA

T. 01483 484 200 E. enterprisehub@seeda.co.uk www.seedaenterprisehub.co.uk www.seeda.co.uk