

# Entrepreneurship Education and Management Skills: Contributory Factors in the Development of Irish SMEs

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# **Declaration**

I hereby certify that this material, which I now submit for assessment of the programme of study leading to the award of Master of Arts in Human Resource Management is entirely my own work and has not been taken from the work of others and to the extent that such work has been cited and acknowledged within the text of my work

Signed	Andra Ryan

# **Abstract**

There are in excess of 200,000 small to medium enterprises (SMEs) operating in Ireland. The Irish government has hailed them as the 'drivers' of the Irish economy, whilst the Irish Times described them as 'the spine' of our economic success. Now, Irish SMEs are feeling the brunt of the economic crisis. Both the success and failure of SMEs are linked to both managerial and entrepreneurial competencies. Entrepreneurship education and management skills are vital to SME development. For this reason, this study analyses an entrepreneur's education and management skills as key determinants in the development of Irish SMEs.

Entrepreneurship is a composite skill, the resultant of a mix of many qualities and traits which are enhanced by entrepreneurship education. Therefore, education is a fundamental variable in the ability of entrepreneurs to develop and start-up an enterprise Equally vital is an entrepreneurs management skills. Management consists of the interlocking functions of formulating corporate policy, organising, planning, controlling and directing business resources. Management is one of the main distinguishing features of SME development.

This study uses a quantitative method of research surveying Irish entrepreneurs in the ICT sector. In addition to the quantitative closed questions, open-ended questions are used to add value to the study and enhance reasoning of the causal connections between entrepreneurship education and management skills

The findings show a positive correlation between entrepreneurship education and business start up. Despite operating within the ICT sector, the majority of entrepreneurs state that their education is more relative to business than technology. The results also uncover a deficit in managerial skills in some areas of the SMEs, due to a lack of management training, as a result of time and cost restraints. Finally, among the SMEs surveyed, those which were founded pre-recession and had successfully expanded remain unaffected by the economic downturn. These, together with the SMEs founded during the recession, find their main issues to be access to finance and the inability to expand

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# **Chapter 1: Introduction**

## 1.1 Introduction to SMEs in Ireland

There are in excess of 200,000 small to medium enterprises (SMEs) operating in Ireland, with management being considered one of the 'four essential conditions' for their future success (Forfas, 2005). The Irish government has hailed them as the 'drivers' of the Irish economy whilst the Irish Times described them as the 'spine' of our economic success (Enterprise Europe Network, 2010). The definition of an SME varies greatly and to-date there appears to be a lack of consensus amongst government bodies and theorists alike (Murphy and Ledwith, 2007). SMEs are notably difficult to measure as their individualility makes them somewhat intangible and difficult to conceptualise. SMEs must be defined in research because

"Good science must begin with good definitions" (Hill 2001, p 180)

This study makes use of the European Union's (EU) overarching definition An SME is defined by the European Union as

" any entity engaged in an economic activity, irrespective of its legal form" (Enterprise Europe Network, 2010, p 2)

To assist in the understanding of SMEs, all key concepts and definitions, used in this study can be found in Appendix 1

SMEs have long since been differentiated from larger firms in terms of their management, planning and growth patterns (Harrigan, Ramsey and Ibbotson 2009)

The EU has segregated SMEs into three categories 'Micro' firms have fewer than 10 employees with 'small' enterprises having 10 to 29 employees (Enterprise Europe Network, 2010) The 'medium' sized firms contain between 50 and 249 employees (Enterprise Europe Network, 2010) In Ireland, the majority of SME enterprises are 'owner managed micro enterprises' (Forfas, 2005)

The service industry is globally growing faster than the goods industry (Ramsey, Ibbotson, Bell and Gray, 2003 and Harrigan et al 2009) SMEs competing in the Information and Communications Technology (ICT) sector are believed to be raising the bar in terms of dynamic business strategies (Ramsey et al 2003) SMEs are characterised as 'informal social entities' with little organisational structure (Harrigan et al 2009) However, the gap between large enterprises and SMEs is being closed by the successful use of ICTs (Harrigan et al 2009) SMEs within the ICT sector have proved uniquely innovative through the development of bespoke services (Murphy and Ledwith, 2007) Such firms are raising customers' expectations surrounding the speed, value and cost of services (Ramsey et al 2003 and Murphy and Ledwith, 2007) The 'Internetworked' SMEs are believed to be more responsive, flexible and dynamic, thus creating an internal and seamless planning process (Ramsey et al 2003) Despite, these advantages against their larger competitors SMEs 'lack economies of scale, scope and learning' (Murphy and Ledwith, 2007) However, formal strategic planning and an entrepreneur's managerial skill-set have been related to superior financial performance (Gibbons and O'Connor, 2005 and Forfas, 2005) Two 'critical dimensions' to effective managerial skills are learning and an entrepreneur's education (Gibbons and O'Connor, 2005) The traditional 'learn asyou-go' attitude of entrepreneurs is now considered 'inappropriate' and it can have devastating consequences on the long term growth of an SME (McCarthy and Levy, 2000) Effective management skills within an SME are considered to be key to its success, it maximises control and focuses and reduces uncertainty within a firm (McCarthy and Levy, 2000) An entrepreneur's education and management skills are highly influential factors relating to the development of an SME. This study will address the effect an entrepreneur's education has on their management skills and subsequent attitude to training. This study will also attempt to draw upon the effect an entrepreneur's education and managerial skills may have on the development of an SME.

# 12 Research Purpose and Objectives

The purpose of this study is to explore the possible effects entrepreneurial education and managerial skills/competencies have on the development of an SME. This study intends to investigate the level of formal education achieved prior to running a business. It explores the underlying relationship between the level/type of education and an entrepreneur's willingness/attitude to participate in management training. Other relatable objectives include

- Exploring the entrepreneur's background education and attitude to entrepreneurial education
- Evaluating the entrepreneur's management skills and abilities throughout various areas of the SME
- Identifying barriers to management training
- Analyzing what/if any, future strategic managerial initiatives and human resource goals there may be

Finally this thesis seeks to address the characteristics of the individual entrepreneur including, educational background, self perception of skills and underlying attitudes to entrepreneurial education and management training. Organisational characteristics such as firm size, age and growth are also identified to enhance the analysis and gauge developmental progression. Rarely do studies evaluate both individual and organisational characteristics. This study combines both individual and organisational characteristics in order to gam a comprehensive overview about how both individual (educational and managerial competencies) inform organisational development.

# 13 Methodology

For the purpose of this study, questionnaires were drawn up in the form of a writable PDF file, with easy to save answers Surveys were administered to innovative SMEs

in the technology sector. The research aimed to survey 80 SMEs in the technology sector, within the County Dublin area. All the surveys were administered by email.

The survey is designed to gather mainly quantitative data however, some open ended questions were introduced, to provide the entrepreneur, with an opportunity to explain and expand upon their previous answer. The qualitative data was collected and analysed for use in the narrative text. The main quantitative data produced specific results, on the entrepreneur's education and managerial skills. The qualitative questions were useful in finding any underlying commonalities, such questions also assist in the avoidance of reductionism. Reductionism occurs when highly structured surveys disallow for any flexibility to answers. An otherwise rigid survey, can limit the range of critique, underlying mechanisms, relationships and attitudes to entrepreneurial education and managerial training which may expand disciplinary space. Exploring both the entrepreneurs education and managerial skills assists in identifying the 'cause and effect' between the two variables.

#### 1.4 Justification of Research

Recent years have witnessed a surge of attention paid to SMEs and how they operate Entrepreneurial Education (EE) has become a primary focus, and specifically academia's influence upon entrepreneurship, as their omnipresence has had significant impact on the developmental behaviour of SMEs (Mustar, 2009 and Kozlinska, 2011). The managerial skills of entrepreneurs have also become accountable for the success and failure of SMEs (Clarke, Boocock, Smith and Whittaker, 2000). It is important to note that the above areas have come under significant academic criticism due to the many interpretations and definitions used by researchers (Hill, 2001). Much of the research has churned out similar competencies from which future research can be conducted. This thesis utilises such competencies and applies them to Irish entrepreneurs, from the ICT sector.

#### 1.5 Thesis Outline

This thesis is presented in six chapters. Chapter one provides an introduction into the research topic. It outlines the background and current academic interest which the study has drawn upon. This chapter also outlines the purpose and objectives of the study, the methodology used and the justifications for undertaking the outlined topic. Chapter one concludes with a plan or outline for the rest of the dissertation.

Chapter two contams the literature review on entrepreneurship education (EE) management and SME development Section 2.1 illustrates the background of Ireland's current economic situation. This is fundamental to the research to give the reader an idea as to the turbulent economic climate SMEs operate in. The chapter is divided into two sections, Celtic Tiger Ireland and Recession Ireland. Both sections warrant academic attention in order to understand the varying challenges posed at SMEs at start-up, during two very different times. Section 2.2 focuses on EE. This chapter focuses on a number of relevant issues related to EE through presenting theories and views from several academic publications. Section 2.3 advances towards management and SME development. This section also makes use of academic publications detailing the different and progressive aspects of management in an SME context. This chapter presents definitions and displays various viewpoints on the advantages of EE and management in SMEs.

Chapter three fully explores and explains the methodology The quantitative method employed to gather the information for the research is described in this chapter

Chapter four outlines the findings and discusses the results obtained by the quantitative data. This chapter includes statistical analysis, detailing the data findings, using statistical techniques which were recorded in the survey.

Chapter five analyses the results and discussions derived from the findings

Finally, chapter six outlines the conclusion of the study and recommendations for future research are detailed

As discussed previously, the next chapter will introduce the reader to Ireland's economic background and current economic crisis

# **Chapter 2: Literature Review**

The following chapter introduces the reader to Ireland's economic background. It details Ireland's economic history, addressing the specific eras, pre-recession and post recession Ireland. This chapter reviews SME stage development theories and various aspects of EE which begins by asking the question what is an entrepreneur? This chapter also details the role of education, learning and the transfer of knowledge in a business context. Finally, this chapter discusses management and SME development. It also highlights the role and importance of management in SMEs. Chapter 2 concludes with a brief review of all the main concepts of EE and management in SMEs.

# 2 1 Background-Irelands Economy

# 2.1.1 Celtic Tiger Ireland

Looking back, Celtic Tiger Ireland appeared to be one great disillusioned spending spree Even Ireland's economic and social research institute (ERSI) failed to predict the catastrophic economic collapse which lay ahead However, there were concerns regarding Ireland's economic instability, which was mainly centred upon the construction sector (O'Halloran, 2012) In the 1990s, Ireland's manufacturing sector

'ran out of steam' and most of our economic growth was centred upon services and construction trends that were 'unsustainable' (McCarthy and O'Malley, 2006) Significant outflows of profits meant our impression of contributions, made by various sectors to the Irish economy, were miscalculated (McCarthy and O'Malley, 2006) Fitzgerald, Barrett and Siedschlug (2006) mentioned the 'potential risk' to Ireland's financial stability, from the 'housing market' claiming that it should be 'closely monitored' A 'slow down' in the USA's home market prevailed, although the overall impact was limited, the effect on Ireland was 'stronger' due to our linked trade connections (Fitzgerald et al 2006) It was becoming apparent that the long term sustainability of Ireland's economy was under threat Ireland's economic stability could only be made feasible, if the nation remained flexible and generated 'export earnings' (McCarthy and O'Malley, 2006)

In 2006, Ireland was a glistening ray of hope for all budding entrepreneurs Ireland consistently surpassed the EU average in terms of innovation and internationalisation. In less than 3 decades Ireland went from being a 'poor cohesion company' to the most 'advanced high tech enclave of the EU' (O'Callaghan and Lenihan, 2006). The European Commission (2006) revealed that there was 20 SMEs per 1000 inhabitants of Ireland. People starting their own business were held in high regard and were more 'Internet based' than our European competitors (European Commission, 2006). Irish SMEs soon emerged as dynamic competitors (O'Callaghan and Lenihan, 2006). Despite these glowing statistics, a survey conducted by Chambers Ireland in 2006, stated that, "56% of previously established SMEs claimed they did not use the Internet to advertise, purchase or gain knowledge about their competitors" (Larkin, 2011). The Central Statistics Office (CSO, 2008) reported similar findings claiming that only 2/3rds of Irelands SMEs did not use the Internet. CSO (2008) also stated that SMEs generally made less use of more advanced technology.

By 2006, Irelands SME workforce had grown by 90% since 1995 (Larkin, 2011), thus, illustrating that SMEs are a countries 'economic centre' and a significant source of employment (Aguilera-Enriquez, Gonzalez-Adame, and Rodriguez-Camacho, 2011) The growth and influence of such businesses is as a result of globalisation. There is also a general consensus among theorists that these 'little big businesses' have rapidly

matured (Hill, 2001) As a direct result of globalisation, their scope of marketing broadened and as such, so did their actionability (Saren, 2009)

However, Irelands efforts to entice foreign firms into contributing to the domestic business market meant an over reliance on foreign industry (O'Callaghan and Lenihan, 2006) Irelands 'dualistic approach' relied heavily on foreign industry to assist domestic SMEs in growing through business linkages and spill-over's (O'Callaghan and Lenihan, 2006) Despite having a competitive knowledge economy, Irish SMEs were still 'feebly embedded' in foreign firms (O'Callaghan and Lenihan, 2006) When the foreign industries pulled out of Ireland SMEs disintegrated, signalling their recession induced fight for survival

#### 2 1 2 Recession Ireland

Nowadays, the international situation has become more complex and uncertain, thus stunting the actionability of SMEs Debt levels of larger economies have dramatically risen, fuelling further the 'financial turmoil' inherent in our markets today (Durkan, Duffy and O'Suillivan, 2011) Unemployment levels stand at 14 3% and Irelands overall domestic demand remains very weak (Durkan et al 2011) The eurozone is set to grow a mere 0 2% in 2012 and previous predictions for Ireland's exports have gone from 4 6% to 3 4% (Hobbs and Concannon, 2011)

SMEs are feeling the brunt of the economic crisis. Access to financing is proving to be the greatest barrier to the 'creation, survival and growth of SMEs' (OCED, 2009). SMEs are now forced to contend with a 'double shock' (OCED, 2009). Firstly, a sharp decline in demand for goods and secondly, a tightening of credit conditions (OCED, 2009). This combination of financial challenges is severely affecting cash flow systems. SMEs have proven to provide a considerable amount of profit to the banks (Moran and Ibbotson, 2005). The relationship between the banks and small business customers has traditionally been 'ambivalent' (Moran and Ibbotson, 2005). Many of the main money lenders pushed SMEs towards borrowing as opposed to providing equity finance (Moran and Ibbotson, 2005). Amidst a recession this means increased rates of debt and lower rates of profit.

The importance of SMEs in 'normal times' has often been acknowledged by economists and politicians but their true contribution is only becoming more evident now SMEs currently employee 99% of the private sector labour force throughout the European Union (EU) (OCED, 2009) Now in times of crisis, the restoration of innovative, national enterprise is proving even more necessary than before

"Innovation in indigenous enterprises is crucial to Ireland's efforts to retain competitiveness and restore growth" (Ruane and Siedschlug, 2011 p 1)

The Irish government's policies must enhance innovation systems, enable enterprise growth and promote links to international markets (Ruane and Siedschlug, 2011) Minister for jobs, enterprise and innovation, Richard Bruton said that, the government is 'determined' to improve their support to job creation through improving 'access to finance and reduction in costs' (Hobbs and Concannon, 2011) However, the government's 'deliberate' attempts to strengthen banks balance sheets and increase lending to SMEs have remained fruitless (OCED, 2009) The banks attitude to lending remains stagnant and 'credit mediators' have been deployed to monitor and ease the flow of funding (OCED, 2009) The incredible odds stacked against SMEs and their considerable contribution to the economy make their success all the more deserving of economic, political and academic investigation

# 2 2 SME Stage Development

SME stage development theories, detail the progression of SMEs, as they grow SME growth is a consequence of the strategic choices made by the entrepreneur and the structural characteristics of the external environment from which it operates (Schmelter, Mauer, Borsch and Brettel, 2010) Development is understood as

"The systematic use of scientific and technical knowledge to meet specific objectives or requirements [and] the process of economic and social transformation that is based on complex cultural and environmental factors and their interactions" (Business Directory 2010)

The precise failure rate of SMEs is unknown, though roughly, 55 percent of all SMEs will fail within the first five years and 81 percent will fail within ten years (Dodge and Robbins, 1992) SMEs grow at different rates, this suggests that strategic choices made by the owner-manager have a significant impact on SME growth (Schmelter et al 2010) Here, 'growth' is understood to be 'an organisational outcome that reflects choices made by managers' (Schmelter et al 2010) Notably, other factors do affect the growth of an SME 'Growth' in the short term is constrained by access to finance and limited in the long term by market demand (Deakins and Freel, 2003) The results derived from growth theories suggest four main factors that enable SMEs to grow, including

- 1 Opportunistic perceptions of the external environment
- 2 Controlled ambition of the owner-manager to enable growth
- 3 A business culture of innovation and flexibility
- 4 Use of extensive private business networks (Hansen and Hamilton, 2011)

Stage development theories, depict firms as adaptive structures which can change rapidly in size and structure (Hansen and Hamilton, 2011) Storey (1994) claims that rapid growth is a result of three intersecting spheres which includes the entrepreneur, the firm and the business strategy This is because firms have 'no clear transition' and it is only when these three intersecting spheres combine that growth occurs (Storey, 1994) Hansen and Hamilton (2011) agree, claiming that current development models of SMEs assume growth to be linear and sequential, when in fact growth is linked to the absorptive learning capacity of SMEs. The idea of a 'learning organisation' is a concept that accepts knowledge as the 'catalyst' which is needed to propel firms forward in a 'holistic way' (Birdthistle and Fleming, 2005). In order to become successful, SMEs must learn and change at the same rate as the environment (Birdthistle and Fleming, 2005). However, stage development theories assume the learning of a firm to be linear, thus maintaining the view that a firm has a set of 'lessons' which must be learned before the next stage can begin (Hansen and Hamilton, 2011)

Development theories outline generic stages which begin at the point of SME creation and end when the firm has developed into a viable enterprise (Dodge and Robbins,

1992) Penrose (1995) utilised the image of the caterpillar to depict the life-cycle of an SME to be inevitable. The firm growth model by Greiner (1998) builds upon the evolutionary ideals of Penrose (1995) but place greater emphasis on crises as the point of revolution. By contrast, Church and Lewis (1983) depict a linear model that assumes the firms development from stage-to-stage without any evolutionary or revolutionary ignition. This model is one that addresses the horizontal and vertical aspects of a firm whilst being mindful of their internal complexities. A stage development model by Scott and Bruce (1987) details the assumed sequential growth patterns of an SME. There are five stages outlining each transitionary period.

- Inception
- Survival
- Growth
- Expansion
- Maturity (Scott and Bruce, 1987)

Other life-cycle models vary slightly, however each model encapsulates four common phases, formation, early growth, later growth and stability (Dodge and Robbins, 1992) The formation stage is characterised as 'turning a venture or idea into a business entity' (Dodge and Robbins, 1992) The early growth stage details the establishment of the firm through 'strong positive growth with a feasible product or service' (Dodge and Robbins, 1992) Later growth illustrates the entry of direct competitors, a firm must decide to expand to maintain stability (Dodge and Robbins, 1992) The final commonality amongst life-cycle models is the stability stage At this level the firm now operates as a 'small bureaucracy' and problems with a 'one-person ruler' often occurs (Dodge and Robbins, 1992)

Critics claim that SME development theories are deficient (Hansen and Hamilton, 2011) Often such theories assume that each stage delivers a set of problems which are resolved in order to jump to the next phase (Dodge and Robbins, 1992) Problems can persist from phase to phase thus the resolution of such difficulties rely on the action taken by the owner-manager (Storey, 1994) The transition from stage-to-stage is often associated with a crisis (MacMahon and Murphy, 1999) Many models focus on long-term crisis and neglect short term crisis which can impact SMEs just as hard

(MacMahon and Murphy, 1999) Deakinss and Freel (2003) make four valid criticisms of life-cycle models

- Most firms experience little or no growth and will never reach the later stages
- Models do not allow for backward movements or 'the skipping of stages', hence the suggestion of firms merely 'surviving' is not acknowledged
- Firms are not permitted to exhibit characteristics from more than one stage
- Crises can occur externally and in a random manner, which is outside the control of the owner-manager (Deakinss and Freel, 2003, p 166)

Despite their flaws, life-cycle models provide a 'useful starting point' from which the growth of a firm can be analysed and conceptualised (MacMahon and Murphy, 1999). There must be a process which details the process of a firm from small to large (Deakinss and Freel, 2003). The importance of the entrepreneur's management skills is detailed in the developmental potential of an SME. Therefore this study must assess the entrepreneur's management skills, gauging their areas of strength and weakness. Areas which remain sources of weak managerial skills will persist to be problem areas that may hinder the development of an SME into the next stage of their life-cycle.

Notably, not all entrepreneurs are motivated to grow and expand their business (Storey, 1994 and Hansen and Hamilton, 2011) These entrepreneurs have been characterised as 'trundlers' and their ambitions are limited (Storey, 1994) Such firms maintain an 'internal focus' and are scrutinised for 'plodding along in pursuit of the status quo' (Hansen and Hamilton, 2011) Other entrepreneurs are simply interested in achieving a certain standard of living and simply value the independence of being an entrepreneur (MacMahon and Murphy, 1999) Such individuals are known as 'lifestyle entrepreneurs' (MacMahon and Murphy, 1999 and Deakins and Freel, 2003) Other entrepreneurs are concerned with growth and expansion. This study assesses the level of ambition amongst the entrepreneurs by looking at their strategic initiatives and developmental hopes for the firm

# 2.3 Entrepreneurship Education

## 231 What is an Entrepreneur?

Many academics agree that you cannot know what you are studying if you cannot define it A contemporary entrepreneur is defined as

"The aggressive catalyst for change in the world of business" (Hill 2001, p 179)

This is a broad definition that encapsulates a common view of the role of an entrepreneur in business A more expansive term will assist this study which aims to avoid reductionism and maintain a relatively 'open minded' approach, in order to gain greater understanding, of this phenomenon. The very nature of entrepreneurship is viewed as

" a composite skill, the resultant of a mix of many qualities and traits" (Jyothi 2009, p 39)

The entrepreneurial business model has no clear definitive gauge from which watertight theories have been devised Englehardt (2004) has developed an understanding of the phenomenon describing it as a 'business model of new companies' which are capable of marketing highly innovative products or services Similarly Campos (2012) describes entrepreneurial firms as displaying 'behaviours and procedures' which are orientated towards the recognition, assessment and explanation opportunities' (Campos, 2012) They also believe that such business models are usually associated with 'high-tech sectors' that develop a specific product and show 'extraordinary sales growth' within a chosen market (Englehardt, 2004) Hill (2001) also makes reference to the role and characteristics of an entrepreneur He claims that this young paradigm, originated from the 'conceptual marketing competency' which when refined, lead to the creation of entrepreneurial characteristics (Hill, 2001) These characteristics include vision, creativity, leadership, communication, initiative, intuition, analytical, adaptability and judgement (Hill, 2001) The two most reoccurring characteristics of an entrepreneur are

- Doing things in a new and better way
- Decision making under uncertainty (Jyothi 2009, p 39)

The greatest asset of an SME is its ability to be innovative and flexible Innovativeness refers to a firm's tendency to 'engage new ideas, experiment and take risks' (Campos, 2012) Further studies sought to conceptualise these traits and prove their relevance within the realm of SME development. The success and failure of SMEs is often linked to managerial and entrepreneurial competencies (Forfas, 2012). These small enterprises share in many difficulties that do not usually affect the prevalence of larger companies. Aguilera et al. (2011) claims that SMEs are 'most at risk', when the managers in charge, are not suited to carrying out tasks and making critical decisions. Other problems include

- Economics of state investment, the business environment, public policies, tradition and origin of the business
- Lack of access to capital this is due to ignorance of funding sources
- Level of close personal contact usually quite high in SMEs
- Lack of dominant position within the market place
- Intimate relationship with the local community some companies are tied to the local community via resources (Aguilera et al 2011, p 61)

As a result of the prevailing financial disaster, many academics have begun to acknowledge the relevance of SMEs and therefore, are investigating the role education plays in producing entrepreneurs. For years qualifications have been viewed as a necessity if one is to obtain a job. If entrepreneurs are to be developed then educators must change the 'graduate mentality from 'job seeker' to 'job creator' (Larkin, 2009)

Entrepreneurship Education (EE) is a relatively new paradigm, which as a result, lacks any affirmative theoretical framework. This young scientific area can be defined as

"the ability of an individual possessing a range of essential skills, attributes, to make a unique, innovative and creative contribution in the worlds of work whether in employment or self employment" Northern Ireland Governments, 'Entrepreneurship and Education Action Plan', (cited in Kozlinska 2011, p 207)

Entrepreneurship has been described by many authors as being 'vital' to economic development Rae (2010) describes entrepreneurship as a 'cultural movement' that is reproduced as an 'ideology' through popular media, national policies and education Similarly Ondracek Bertsch and Saeed (2011) agree that the creation of entrepreneurs has its roots in 'cultural beliefs and behaviours'

## 2 3 2 Enterprise Culture and the Cultivation of Entrepreneurs

Culture as a determinant for entrepreneurial creation was originally discussed by Max Weber (1958) who drew upon the links between religion and industrial enterprise Weber (1958) discussed how Calvinism (a particular Protestant Sect) discouraged investing money in pointless luxuries but encouraged investing surplus profits in productive necessities and enterprise Worldly success signified commitment, faith and most importantly, salvation

Despite its historical 'backing' there exist two very opposed ideologies, for culture as a prerequisite, to entrepreneurial creation. The first ideology is from an economist's perspective which rejects the notion that a fertile climate, which breeds entrepreneurial psychological benefits, is enough to 'seriously affect the rate of economic growth' (Ondracek et al. 2011). The second ideology contains a more holistic grounding. Black (cited by Ondracek et al. 2011) stated

"All we know for certain is that once people become conscious of the possibility of economic development in their society, entrepreneurs start appearing" (Black cited in Ondracek et al. 2011, p. 19)

Nations such as the United States of America (USA) are steeped in entrepreneurial legacies laying claim to classic phrase 'the land of opportunity' Last year over 23 million jobs were created in the USA by female entrepreneurs alone, hence entrepreneurs are considered to be the 'primary job creation engine' (Merenda, Li and Dalta, 1973) Policy makers in the EU and USA both understand entrepreneurship, as a requirement, for reaching higher levels of economic growth. The Lisbon Strategy sought to make the EU 'the most competitive and dynamic knowledge based economy' (Kozlinska, 2011) For Rae (2010) this knowledge based economy is little

more than a 'mirage' Maintaining a 'knowledge economy' has its difficulties. In 2011, the Irish Government made cuts to higher education grants and increased student fees (Flynn, 2011). This very action opposes the basic principle of a 'knowledge economy' which relies upon education as a catalyst for developing skills (Vetrivel, 2010). This ideology considers knowledge to be 'a resource' and eradicates any assumptions of manual labour, being a main generator, of economic growth. Therefore, such an economy requires entrepreneurs to harness their own human capital and distribute their ideas and skills (Vetrivel, 2010).

Different countries within the EU display higher rates of entrepreneurial activity than others. For a long time, countries like France and Latvia lagged desperately behind, in new innovative start-up enterprises. France has in the past been criticised for not encouraging young people to become entrepreneurs (Mustar, 2009). However, the financial catastrophes of 2008 have produced a 'new economic era' that has 'significant implications' for EE and new business start-ups (Rae, 2010). Countries like France and Latvia are acknowledging that times have changed. Universities are attempting to create a new hybrid student, with more entrepreneurial gusto than previous graduates. Both Kozlinska (2011) and Mustar (2009) mention the importance of devising a 'culture of innovation' and an entrepreneurial attitude/spirit in students. Curriculums are devised with the understanding that cooperation between entrepreneurs and universities is 'crucial' (Mustar, 2009 and Kozlinska, 2011)

#### 2 3 3 The Role of the New Entrepreneur

It is not only the implementation of EE that is important but also the shift from 'old entrepreneurship' to a new ideal. Old entrepreneurship is characterised by an 'inherently selfish notion of individual enterprise' which displays 'irrational market behaviour' and holds no 'responsibility' for the consequences of its actions (Rae, 2010). Most firm owners remain preoccupied with maintaining their lifestyle rather than expanding the business (Fuller, 2006). This entrepreneurs primary motives are often centred upon maintaining ones independence (Fuller, 2006). The new idea of entrepreneurship seeks to 'create social value and new opportunities' whilst solving problems and providing services of wider social value (Rae, 2010). This requires a firm to engage in the product market by proactively seeking new opportunities.

proactive refers to a firm's ability to maintain a forward looking perspective, whilst anticipating future competitive threats (Campos, 2012) Entrepreneurs must maintain competitive aggressiveness that outperforms rivals by maintaining a strong offensive response to the external environment (Campos, 2012)

## 234 Entrepreneurship Education

Education has long since been valued for 'developing attitudes, skills and behaviours' (Sownya, Majumdar and Gallant 2010) Admittedly, some students may be more 'predisposed to enterprise' than others (Broughton, cited in Larkin, 2009) Despite any psychological or cultural predisposition to opposing entrepreneurship, education is the best way to mould innovative and business minded individuals. Highly educated people are also more likely to be the founders of high growth businesses (Bosworth, 2009) Research shows that

"Successful learning experiences tend to beget a desire for more and lifelong learning is vital for any entrepreneur" (Ulrich and Cole, 1987, p 39)

Storey (cited by Bosworth, 2009) positively associates higher education with self employment EE has 'flourished' in third level institutions with work placements, mentoring schemes and specialist speakers from the world of business (Jones, 2010). These new methods of experimental learning assist in 'stimulating the supply of entrepreneurs in society' (Jones, 2010). Despite such attempts, there remains a strong case for 'reform' within the education system (Sownya et al. 2010). Curriculums must marry the constructs of education with entrepreneurial concepts. EE is successful in manufacturing 'start-up' enterprises and producing a change in the way students perceive careers in enterprise (Ulrich and Cole, 1987). However, failure rates in the SME sector are at their peak in the first five years (Sownya et al. 2010). This proves that whilst EE produces entrepreneurs many fail in their ability to manage the increased complexities of a growing business and fail to adapt to new learning requirements (Ulrich and Cole, 1987).

## 235 Entrepreneurial Learning

Learning within technology based firms is an 'integral' and 'fundamental' part of their development (Rae, 2006) Despite the positive association between entrepreneurial learning and development, entrepreneurs still want to focus on real time problems (Raffo, O'Connor, Fullertt and Banks, 2000) Entrepreneurial Learning is defined as

" learning to recognise and act on opportunities, through initiating, organising and managing ventures in social and behavioural ways" (Rae, 2006 p 40)

Much of the formal educational accomplishments of entrepreneurs acts as a guiding force for the business, providing a solid basis and inspiration from which a firm is created (Raffo et al 2000) For Rae (2006) entrepreneurial learning can provide knowledge and skill development but the true 'art' of entrepreneurial practice is taught through business experience

Entrepreneur learning is an important variable in the success of the development of an SME, it represents the alteration of skills, knowledge and attitudes (Van Gelderen, Van Der Sluis, and Jansen, 2005). The two mam types of learning include 'single loop' learning and 'double loop' learning (Argis and Schon, cited by Van Gelderen et al 2005). *Single loop* learning refers to the entrepreneur's capacity to follow on from their mistakes, with more efficient methods of conducting business (Van Gelderen et al 2005). The *double loop* learning represents a more proactive approach, whereby an entrepreneur will try to discover and exploit new sources of knowledge (Glederen et al 2005). For Kuratko,

"to teach individuals to become not only more enterprising but businessmen as well is an undertaking that in both time and scope is beyond the capabilities of an academic business school" (Kuratko cited by Matlay, 2005 p 384)

Here it is suggested that an entrepreneurs learning is continuous Entrepreneur education and entrepreneur learning are key factors in SME survival (Matlay, 2005). Studies have shown a positive co-relation between entrepreneur education and

entrepreneur learning, as key factors in SME development. Surprisingly, entrepreneurs refrain from participating in further training programmes. With this understanding, this study investigates the possible barriers and attitudes entrepreneurs have to management training.

## 2.3.6 Knowledge Transfer and the Role of Learning in SME Development

When formal EE has been accomplished, the entrepreneur must transfer the accumulated knowledge towards developing the business. EE helps shape an entrepreneur's attitude, hence, the new budding entrepreneur is now better placed to identify a business opportunity and turn it into a reality (Bosworth, 2009). Transferable attributes include communication skills, confidence, and the ability to construct a water tight business plan which is vital for obtaining grants (Bosworth, 2009). However, there remains a limited understanding of the complexities between EE and its role in the development of SMEs (Matlay, 2008).

'Learning' is the outcome of both personal and situational determinants (Van Gelderen et al. 2005). The key learning outcomes of EE make it viable for the entrepreneur to elicit key business skills to create a business (Bosworth 2009). To sustain the business requires a much greater skill set. Characteristically, SMEs expand rapidly, forcing the entrepreneur to either up-skill through training programmes or source assistance from external consultants (Bosworth, 2009). The continuation of learning in a business context supports the ideology that EE can occur prior to and during entrepreneurial activities (Kuratko cited by; Matlay, 2008). The excessive strain on SMEs to grow and expand presents the entrepreneur with challenging situations and an opportunity to test new ideas and reframe old methods of doing things (Van Gelderen et al. 2005).

However, educating the 'adult' entrepreneur is often rife with problematic factors (Weirauch, 1983). Many adult entrepreneurs have 'certain basic fears' about returning to education especially given the 'Pepsi generation' approach to learning (Weirauch, 1983). The 'Pepsi generation' approach to learning is unappreciative of the complex and unique differences in learning behaviours between young students and adult entrepreneurs (Weirauch, 1983). This approach to teaching students alienates the older generation and erodes their willingness to learn.

The aim of entrepreneurial learning lies in owner-managers taking responsibility for their own learning and development (Daives, 1999) Entrepreneurial learning should be a dynamic process of awareness and reflection which turns knowledge into functional practices (Rae, 2006) Raffo et al (2000) agrees that entrepreneurial learning is the 'gentle back and forward' reflection of business experiences and practices Relying merely on their current strengths is a fundamental weakness of many entrepreneurs (Daives, 1999) Specific business experiences, including failure, can also provide entrepreneurs with a critical learning opportunity (Yamakawa, Peng and Deeds, 2010)

Business failure is an experience most entrepreneurs would wish to avoid. Too much failure can erode confidence and eradicate an entrepreneur's sense of competency (Yamakawa et al 2010) Most entrepreneurs/owner managers are faced with increasing personal demand (Daives, 1999). Therefore many seek a 'quick fix' approach to a problem (Daives, 1999). Hence, latching on to the latest managerial fad and discarding it when they realise it is not working (Daives, 1999). Many entrepreneurs ignore the opportunity to learn from such mistakes. As a result, many blame the external environment as opposed to assessing internal mechanisms that contributed to failure (Yamakawa et al 2010). The entrepreneur's willingness to learn through formal and non-formal learning experiences can present them with a competitive advantage. The entrepreneur's managerial skills and participation in training courses is also considered to be a source of competitive advantage.

# 2 4 Management and SME Development

#### 2 4 1 The Role of Owner/Managers in SME Development

As discussed previously, SMEs are vital to the economic and social health of a country Similarly, the role of the owner/manager in an SME is of equal importance to the internal health of the firm. The owner/manager's role in the development of SMEs is expansive and far-reaching. Effective management of SMEs is vital to their development, survival and success (Clarke, Boocock, Smith and Whittaker, 2000). A manager is defined as a person who

" has the power and responsibility to make decisions to manage an enterprise management consists of the interlocking functions of formulating corporate policy and organizing, planning, controlling, and directing an organization's resources to achieve the policy's objectives" (Business Directory, 2010)

Managerial competency is a fundamental variable, which not only determines the success of an SME but also the sustainability of a small firm (O' Gorman, 2001) The terms 'skills' and 'competencies' are often interchanged in academia. For the purpose of this study, competency/competencies are considered to be any underlying characteristic of a person that results in effective and/or superior performance on a job (Down, 1999)

Clarke et al (2000) claims that the mam distinguishing features of SME development are the 'education, training and experience' of senior managers. As an SME grows, the areas of management become more complex and problematic. However, the rapid growth of SMEs and the general youth of the ICT industry in Ireland have resulted in a sector 'devoid of management skills' (Wightman and McAleer, 1995). The two main areas that require management are, the 'functional areas' which are relative to both people and the 'strategy' of business (Grey, 2006). Such areas allow an SME the ability to remain competitive and future focused (Grey, 2006). Strategic initiatives play a fundamental role in SME growth. The area of strategy or 'future focused imitatives' is also described as

" the strategic and structural choices made by entrepreneurs" (Hambrick and Crozier, cited by O'Gorman 2006 p3)

As both the 'functional' and 'strategic' elements of management, are considered fundamental to SME development, each competency is used as a measureable variable within this study. The survey conducted in this study explores what, if any, strategic future goals the owner/manager may have considered. The owner/manager was asked to rate their 'functional management skills' in various different sectors of the business. The individual's response to the 'functional management skills' questions assisted in generating a response as to their 'perceived' capabilities (Grey 2006). These are

relevant internal variables that must be measured, whilst being mindful of the 'external impact of the industry structure' (O'Gorman 2006)

## 2 4 2 Management Training in SMEs

For many SMEs, the time and resource constraints place strong pressures on the individual owner/manager to develop the skills and capacity to successfully steer the business (Grey, 2006) Skills are referred to as 'the ability to do something well' (McLarty and Dousios, 2006) The concept of training and skill development embraces the ideology of proficiency, competence and positive attributes (McLarty and Dousios, 2006) Training can be understood as

"Organized activity aimed at imparting information and/or instructions to improve the recipient's performance or to help him or her attain a required level of knowledge or skill" (Business Directory, 2010)

Despite the positive outcomes of management training and the pressures put upon owner/managers to embrace skill development many still remain reluctant to partake or invest in training (Grey, 2006) Entrepreneurs are 'notoriously negative' and even 'ambivalent' towards training programmes (Wightman and McAleer, 1995) Despite the negative reviews of SME training levels, one area of management SMEs excel in is 'communication' (Singh, 2006) The small size of the firm can enhance a 'family atmosphere' which facilitates fast and effective communication (Singh, 2006)

The training within SMEs remains relatively informal (Grey 2006) The current view of owner/managers is that 'management' is a craft that is best developed on-the-job (Clarke et al. 2000). Clarke et al. (2000) argues that informal, on-the-job training needs to be formalised. The boundaries between learning through 'experience' and 'on-the-job training' are being detrimentally blurred. Owner/managers fail to assess their experiences or analyse the results in terms of learning outcomes (Down, 1999). Knowledge of product/market, good judgement, perception and business intuition are somewhat intangible skills (Collinson and Quinn, 2002). These cannot be taught in 'short term' training sessions, therefore management training must focus on more 'tangible' or 'measurable' competencies (Collinson and Quinn, 2002).

## 2 4 3 Entrepreneurs Attitudes to Training

For many SMEs underinvestment in 'training' can explain low productivity and poor performance (Hoque and Bacon, 2006) Traditionally, management training has not enjoyed a reputation as a worthwhile activity, which can add value and assist organisations in coping with change (Bryan, 2006) SMEs tend to have reactive responses to challenges and often display a 'micro-firm culture of individualism' or are 'particularistic' by nature (Gray, 2004 and Gilman and Edwards 2008) The idea of personal independence is the most commonly assigned reason for becoming an entrepreneur (Gray, 2004 and Hoque and Bacon, 2006) Entrepreneurs often disregard any training initiatives as they are 'emotionally unsuitable' to being taught and often act intuitively rather than strategically (Richbell, Watts and Wardle, 2006) Firms operating in a turbulent environment are often more concerned with survival rather than growth (Hoque and Bacon, 2006)

Poaching can also act as a disincentive for owner-managers to train employees (Bryan, 2006) Commonly, ICT firms poach specific people who have the required skills, rather than develop them internally (Bryan, 2006) The very idea of management training sparks a need for formality which some entrepreneurs may find 'burdensome' (Bryan, 2006) Many entrepreneurs wish to avoid developing a top heavy hierarchy in favour of informal 'functional flexibility' (Bryan, 2006) Functional flexibility encompasses multi-skilling and team work (Leopold and Harris, 2009) Both labour flexibility and effective team work must be practised concurrently (Fraser and Hvolby, 2010) A flexible workforce has proven to increase productivity (Van de Meer and Ringdal, 2009) However, the entrepreneur's ability to be multi-skilled and flexible in times of change, is dependent on the amount of time and finances they invest in formal and informal training (Fraser and Hvolby, 2010) Failure to invest time and finances in training will often result m low labour mobility, which is vital in SMEs (Pendleton and Robinson, 2011)

Previous studies would suggest that firm size and growth stage are directly related to the amount of training under-taken by both owner-managers and employees Firms that are growth adverse and resistant to training are proven to have lower resilience (Gray, 2004) Large firms often have the 'resource slack' to contribute to training and

development (Kelliher, Foley, Framptom, 2009) For many SMEs this is an inaccessible luxury (Kelliher et al 2009) The size of a firm can have an inverse effect on the levels of management training (Gray, 2004) Small firms often focus on operational areas whereas larger firms focus on Human Resource (HR) initiatives and training (Gray, 2004) Studies suggest that levels of training undertaken in firms with less than 24 employees tends to be poor (Hoque and Bacon, 2006) Generally formal training appears to increase as the size of the SME mcreases (Hoque and Bacon, 2006)

This study seeks to explore training areas often neglected in other studies Understandably this study recognises that

"Training is only one among a suite of factors that might influence performance" (Bryan, 2006 p 642)

However, the traditional failure to characterise owner-managers attitudes and perceptions to management training warrants investigation in a measurable and exacting format. This research aims to explore how SMEs behave and why, rather than what SMEs do and how they do it. Lack of research into entrepreneurial attitudes has proven problematic in the development of training programmes. Developing specific training programmes to both entice and serve the Irish SME owner is essential if they are to outperform competitors and boost the economy

#### 2 4 4 Developing Training Programmes

Competent management within SMEs has been recognised as an enabling factor in sustaining a competitive advantage (Wightman and McAleer, 1995) European policy makers are the main drivers of management development programmes (Gray, 2004) The urgency behind the development of such programmes springs from global competition from Asia and America (Gray, 2004) The emergent support for SMEs is also derived from the necessity to create jobs

The potential of SMEs to grow and generate employment is significant. In light of these potential outcomes, the Irish government is playing an 'active role' in the SME sector by encouraging learning (Kelliher et al. 2009). In the Irish context, SME

training programmes have failed to consider the cultural, educational and social background of Irish entrepreneurs (Kelliher et al 2009) Similarly, much of the research on SMEs focuses on marketing and finance issues, whilst ignoring an entrepreneur's managerial competencies and educational background (Richbell et al 2006) Current literature illustrates the enormous diversity of what owner-managers do (Taylor, Thorpe and Dawn, 2002) The very act of managing has been described simply as

" a matter of running an organisation so that the variety of people who want something out of it will go on supporting it " (Watson cited by Taylor et al 2002, p 553)

Beyond the mere function of management is a blurred narrative of conflict, compromise and co-operation (Taylor et al 2002) The destination of social and organisational 'order' can only be gained through negotiation (Taylor et al 2002)

Current literature would suggest that firms operating within the ICT sector are particularly neglectful of management training ICT sectors often focus on 'product related skills' and refrain from in-house business, management and interpersonal skills training (Wightman and McAleer, 1995) Developing efficient management skills in the ICT sector is an 'essential perquisite' to technological advancement and innovation (McLarty and Dousios, 2006) Management training programmes must enable owner-managers to take control of their learning, rather than prescribing solutions on them (Kelliher, Foley and Frampton, 2009) The true development challenge lies in creating a circle of formal systems of support that can encourage and assist continuous lifelong learning (Gray, 2004)

## 2 4 5 Entrepreneurs- Leaders or Managers?

Anyone can be a leader in the correct conditions (Van Vugt, 2006) A leader is described as being someone with 'unusual competence in discernment or perception' (Blumen, 2005) Leadership is defined as

"A leader comes to the forefront in case of crisis, and is able to think and act in creative ways in difficult situations. Unlike management, leadership flows from the core of a personality and cannot be taught, although it may be learned and may be enhanced through coaching or mentoring" (Business Dictionary, 2010)

Leaders are expected to assist organisations in 'stimulating an ethical climate' and achieving goals (Kalshoven, Den Hartog and De Hoogh, 2011) A leader's inability to learn and adapt quickly to changing markets can prove fatal (Povah and Sobczak, 2010) A leader must display 'learning agility' which refers to the ability to learn from one's experiences and apply that learning to new and different situations (Povah and Sobczak, 2010) The role of a leader is similar to that of an entrepreneur Traditionally, entrepreneurs have distanced themselves from the title of manager in-favour of being known as leaders Entrepreneurs have long since been hailed as pioneers of industry, though arguably the importance of leadership stems from a more evolutionary part of humanity

Evolutionary theory argues that leadership is a function of the situation (Van Vugt, 2006) Every species is faced with an important 'set of adaptive problems' that require answers to questions like 'what to do , when to do it and where to do it' (Van Vugt, 2006) Answers to these questions are easily solved, when one individual takes the initiative to solve them (Van Vugt, 2006) This type of cooperative functioning has benefitted humanity greatly (Van Vugt, 2006) In modern times, the workplace has become a hub of 'existential frustration' which creates a climate of 'professional mystique' (Densten, 2005) This mystique is fed by uncertainty, ambiguous decision making and lack of strategic planning

There exist many different types of leaders 'The Big Five' personality traits common to great leaders include extraversion, agreeableness, conscientiousness, emotional stability and openness to experience (Kalshoven et al 2011) Charismatic leaders communicate through the use of positive affirmations (Scheeres, 2011) The art of charismatic communication lies in speaking 'respectfully' of the past, 'realistically' of the present and 'optimistically' of the future (Scheeres, 2011) Leaders in large organisations often hold back information, out of concern for the effect it may have of morale (Scheeres, 2011) However, entrepreneurial leaders hold back on information

out of self interest. High turnover rates mean any information entrusted to employees may eventually end up in competitor's hands

Leaders are entrusted to dissolve the myths that enhance our fears of the unknown For this reason, they are called upon in times of great crisis, to create a vision for the future. Amidst the recession entrepreneurs are being called upon to generate employment and enhance Ireland's economic status. However, managers are not Often entrepreneurs experience a major shift in their roles as the firm begins to grow (Caldwell, 1993). Managers are expected to

" encourage commitment rather than compliance, participation rather than control" (Caldwell, 1993, p 85)

Managers stabilise the organisation and assist in the implementation of changes (Lucey, Bateman and Hines, 2005) Leaders foster change and create a climate where change is the norm (Lucey et al 2005) They maintain core skills such as self awareness, articulating visions and goal setting (Zornada, 2005) A leader is an innovative developer, who can inspire trust and have a long range perspective (Lucey et al 2005) The rewards for leaders are often more appealing than those of managers The spoils of leadership such as power, control, authority and influence are often enjoyed by entrepreneurs (Kellerman, 2005) However, the perks to being an entrepreneurial leader become outweighed by the managerial responsibilities that evolve as the firm progresses. This study looks at the functional characteristics of leaders and managers. The research provides an insight into the entrepreneur's perception of self. The survey discovers if the entrepreneur believes himself/herself to be more or a manager or a leader. The perception of oneself as a leader versus that of a manager may preclude whether one undertakes management training If entrepreneurs perceive their role to be that of a leader, than they may find no reasoning, to participate in management training

## 2 4 6 The Role of Strategic Human Resource Management in SMEs

As discussed above the framework for this study does not intend to cover every aspect of growth. This section of the study seeks to gam an understanding of the conscious

effort, made on behalf of the owner-manager, to strategically plan and implement HR initiatives in the future. Many SMEs display a continuing informal approach and limp implementation of HR 'best practice' initiatives (Gilman and Edwards, 2008). Rather than ensuring sophisticated use of HR models, their formalisation are often piecemeal and reactive (Gilman and Edwards, 2008). Barrett and Meyer (2010) believe that SMEs face a metaphorical 'wall of problems' with HR being a brick in that wall

Owner-managers decision-making affects the level of external HR advice sought (Bennett, Robson and Bratton, 2001) Instead many SMEs opt for 'horizontal collaboration' with what are essentially networks of competitors (Bennett et al 2001) Whilst this method of gathering information is devoid of HR specialism, networking can increase the level of business concentration, thus enhancing innovation in products and services (Bennett et al 2001) SMEs operating in the ICT sector, are often more technologically advanced, this allows them to search for information on competitors, prices and potential customers (Walker and Tobias, 2006) In many cases firm size does not affect the levels of HR strategic planning (Walker and Tobias, 2006) However, the level of familiarity and sophistication of use does vary (Walker and Tobias, 2006)

Growth tends to be the context in which HR appears to become a problem (Barrett and Meyer, 2010) A 'problem' is defined as

" an undesirable situation that is significant to and may be solvable by some agent, although probably with difficulty" (Agre cited by Barrett and Meyer, 2010 p 134)

The nature of organisational growth and change requires a positive outcome to either improve business performance or solve a problem (Nadina, 2011). Given that many SMEs are 'reactive' in their approach to change, many remain unwilling to initiate change unless forced to do so. The turbulence of the internal and external environment makes it difficult for SMEs to manifest change initiatives (Skordoulis, 2004). McLean (2005) describes organisational change as an 'alteration in organisational design or strategy' and personal change as the 'modification of an individual's behaviour'. SME growth is not a goal for all entrepreneurs and so many disregard any HR initiatives to do so (Barrett and Meyer, 2010). In every SME there comes a 'tipping' point related to

the firm's absorptive capacity which subsequently contributes to the firm's survival and success (Barrett and Meyer, 2010) If owners have a 'blueprint' for HR at the time of the firms founding it can have long lasting effects (Barrett and Meyer, 2010) This acts as a strategic compass and internal gauge of the overall health of the firm

The section of the survey addressing future strategic plans and HR initiatives, enhances the understanding of the perceived benefits of HR as a source of competitive advantage and value

### 2.5 Chapter Conclusions

The drastic economic change from Celtic Tiger Ireland to recession induced Ireland has presented SMEs with many problems including, access to finance and a significant decline in the demand for goods. The necessity to remain competitive and harness internal strategies is paramount to the survival and growth of SMEs. SME growth and development in the long term is affected by the decisions made by owner-managers. Hence, this thesis preoccupation with the entrepreneur's personal education and managerial skills.

EE reflects an individual's ability to harness their skills to innovatively contribute to the world of business. Culture can be a powerful catalyst in producing entrepreneurs and increasing economic growth. The current economic climate requires a new type of entrepreneur, one who seeks to create social value and new opportunities. EE assist's entrepreneurs in manufacturing a business idea and turning that idea into a reality. However, both formal and informal continuous learning is vital if an SME is to survive and develop beyond the 'start up' stage. Continuous learning is stunted by the lack of understanding trainers have when developing training programmes, to suit the needs and learning behaviours of entrepreneurs.

Managerial competency is a fundamental variable which determines the success of an SME Despite positively contributing to the business, entrepreneurs still display a particular ambivalence towards participating in managerial training programmes Entrepreneurs remain unconvinced as the 'value' of management training and managerial skills are often developed on-the-job Management training programmes

must enable the entrepreneur to take control of their learning, rather than insisting on a set programme for all SMEs, which are inherently individualistic by nature Traditionally, entrepreneurs are considered to be leaders rather than managers. If entrepreneurs perceive their role to be that of a leader then they may disregard the idea of participating in management training. One particular area of management, HR, is considerably neglected by many entrepreneurs. As SMEs grow, managerial skills become a necessity. The need for sophisticated HR processes and strategic planning increases as the SMEs structure and market become more complex and demanding. This study conducted a survey on all of the areas discussed above. The following chapter focuses on illustrating the methodology behind the research and the survey design is discussed in detail.

# **Chapter 3: Research Methodology**

This chapter describes the research inethodology which was followed in order to obtain the research objectives as discussed previously in Section 1.2. This chapter discusses the type of research instrument used in order to collect the required data. The reason for choosing the said methodology is also discussed. The process of gaining access to entrepreneurs/participants and gathering the necessary data is detailed. Finally, any perceived research limitations are highlighted and discussed.

### 3.1 Research Objectives

This study explores the possible effects entrepreneurial education and inanagerial skills/competencies have on the development of an SME. The research investigates the level of formal education achieved prior to running a business. The survey aims to uncover the effects an entrepreneur's education has on their willingness to participate in management training. Hence, if an individual has a high level of educational achievements are they more or less likely to attend management training programmes? The research analyses the entrepreneurs perceived management skills in various areas of the business. Areas that require managerial attention are noted. Barriers to management training are addressed along with the entrepreneur's attitude to training.

Underlying patterns, areas for discussion and future research trends which are also explored include

- Any demographic divide between genders
- Areas under-strain due to the recession
- Future strategic initiatives, both management and HR related
- SME development status and future goals

The mam variables under exploration are the 'entrepreneur's education' and 'management skills/training' and subsequently, how both variables affect the development of the SME. Any interrelated patterns or subversive relationships between the variables noted above are discussed. This study combines the facts of an entrepreneur's education with their perceived management skills and attitude towards management training. Elements of the entrepreneurs past, present and future are explored to gain an overall perspective on their journey to developing their SME.

### 3.2 Research Design

Generally, research design is the way in which data is collected and analysed Research is often undertaken to gather information in a systematic way therefore, increasing ones knowledge of a particular subject or topic (Saunders, Thornhill and Lewis, 2008) The literature review illustrates the way in which an entrepreneurs education and inanagement skills are considerable factors affecting, the growth and development of an SME However, awareness does not always mean understanding (Hess, 2011) Research must acknowledge diverse perspectives but prioritise a more specific collection of 'meaningful' conversations (Hess, 2011)

This study is centred upon quantitative research. Quantitative research is objective and relies heavily on obtaining specific data results (Jean, 1992). Quantitative data is defined as

" a synonym for any data collection technique or data analysis procedure that generates or uses numerical data" (Saunders et al. 2008, p. 153)

This study takes an epistemological position thus, analysing the causal relationships between the preselected variables, an entrepreneur's education and management skills. The epistemological approach to research addresses the nature of elements

constituting a structure (Jean, 1992) This thesis utilises a survey to obtain the required results. A survey or questionnaire allows a researcher to get a 'snapshot' or 'freeze' the current state of reality, within a given group of people (Janes, 2001 and Jean, 1992). Often this position of enquiry is criticised for taking a tunnel vision approach to research (Sale, Lohfeld and Brazil, 2002). Arguments in favour of 'surveys' believe that they can be used to solicit both actions and attitudes of participants thus, presenting 'real world' facts (Janes, 2001).

The open-ended questions in this survey are used in the narrative to expand upon the numerical data. Open-ended questions reduce the distance between data and reason thus, providing a 'causal explanation' (Jean, 2001). Admittedly, this moves towards the realm of a 'mixed method' approach, because no single research method can give a total view of reality (Jean, 2001). Jankowicz (1999) agrees claiming that neither qualitative nor quantitative approaches should be thought of as merely 'exclusive'. Both are intertwined regardless of the theoretical boundaries drawn around the two (Jankowicz, 1999). Quantitative research should embrace a positivist approach coloured by a small degree of interpretivism (Sale et al. 2002). This approach is taken to complement the numerical data and configure the causality between both variables. This mixed method approach is not used to merely remove the weaknesses of quantitative research. Instead, an interpretvist view is designed to add value to the study and enhance reasoning and understanding of the causal connections.

# 3.3 Design of the Survey

The following paragraph illustrates the survey design for this survey. For the purpose of this section, the full survey can found in Appendix 2. The survey was formatted as a writable electronic PDF file, which allowed for the collection and analysis of data, using spreadsheets and statistical tools. This was made possible through the use of the Internet.

The Internet has become the most popular forum for researchers to conduct surveys, due to its speed, cost effectiveness and the large volume of participants available (Johnson, Mills and Dayan, 2008) However, web-based surveys require specific

design strategies to get the required information/ survey accuracy and prevent item non-response (Johnson et al 2008) Item non-response refers to a partially completed survey because some items were skipped or left blank (Biemer and Lyberg, 2010) Survey accuracy also refers to the 'deviation of a survey estimate' from its 'underlying true parameter value' (Biemer and Lyberg, 2010) Generally, a survey is designed to avoid the most 'egregious errors' and control any possible errors so that they are tolerable (Biemer and Lyberg, 2010) The survey designed for this study was given a 'scrollable design' were the length of the survey is revealed from the outset (Peytchev, McCabe, Couper and Crawford, 2006) In non-scrollable surveys participants do not know how much is left to complete and surveys are abandoned close to the end thus, increasing item non response rates (Couper, Lamais and Traugott, 2001) Johnson et al (2008) believes that the crux of a survey design lies in it being 'understandable, user-friendly and interesting' Other dimensions include accuracy, credibility, comparability, usability, relevance, completeness and coherence (Biemer and Lyberg, 2010) The notion of candidates being 'compensated' for their participation is considered to be useful when designing a survey (Johnson et al 2008) Some of the candidates from this study expressed keen mterest m the results of the questionnaire and requested a report be sent to them This can be facilitated once all participants' anonymity is respected and the results published

The most popular surveys which dominate current literature focus on checklists, rating scales, attitude statements and scaling methods (Ambrose and Anstey, 2010) The survey for this study was given a generic layout which spanned across three categories including 'SME background information, entrepreneur's education, management skills/ training and developmental/strategic initiatives. Such a sequential layout strengthens the survey and quickly engages participants (Ambrose and Anstey, 2010). Generically designed surveys mean people are more likely to divulge personal information when questions are presented in 'decreasing order of intrusiveness' (Acquisti, John, and Loewenstein, 2012). When questions are grouped together by category, participants can see how they are related, this reduces the time it takes to complete the survey (Couper et al. 2001). This type of participant co-operation is enhanced from the outset of the study when all privacy related concerns are addressed (Acquisti et al. 2012). This questionnaire was designed to include an introduction page

which focused on privacy concerns and also furnished participants with instructions on how to save survey changes. An introduction page helps gain participants confidence and validates the objectives (Peytchev et al 2006). When attaching the survey to the email an introduction to the study was given detailing its purpose and destination. Messages were also tailored to individual participants to gain their trust and attention.

In total, the survey was designed using four out of the seven categories listed below A survey does not have to include all elements but the inclusion of various categories improves the quality and scope of data (Ambrose and Anstey, 2010) Ambrose and Anstey (2010) have developed a seven category instrument for designing a survey which includes demographics, attitudes, behaviours, knowledge, intentions, propositions and predispositions Surveys can be used to gather information on individual's behaviour, attitudes, level of knowledge and any required demographic information (Ambrose and Anstey, 2010)

The first part of the survey used in this thesis included demographic questions. These were used to uncover any underlying patterns which may enhance current and future areas of research. These introductory type questions assist in 'warming up' the participants (Acquisti et al. 2012). Attitude assessments provide insights which are 'extremely important and disclose critical information' (Ambrose and Anstey, 2010). The second part of the survey utilised closed or fixed-ended questions to uncover specific details of the entrepreneur's education. The third section within the survey used 'knowledge' based questions to benchmark the entrepreneurs understanding of their management skills. These are important for evaluating the effect managerial skills may have on the development of the business. The intentions of the entrepreneurs to develop strategic initiatives were also measured to anticipate future behaviour.

The survey topics were clearly specified in each category thus, leading to greater quality results (Biemer and Lyberg, 2010) Such categories help reduce specification error which occurs when the 'concept implied by the survey question differs from the conceptual needs' (Biemer and Lyberg, 2010) Even through the categorisation of survey questions, theorists agree that there remains no one best design choice for all

(

surveys (Peytchev et al 2006 and Couper et al 2001) It remains a theoretical art which has yet to be perfected

### 3.4 Piloting the Survey

This survey was piloted on seven entrepreneurs in the incubation centre in NUI Maynooth Each person completed the survey in less than fifteen minutes. Feedback from the individuals was positive. Each person agreed with the overall layout and questions proposed were appropriate. The 'tick the box' questions meant that individuals could complete the survey quickly. Some individuals felt that the attitude questions 'why/how' were useful in expanding upon the previous answers given. The individuals within the pilot group felt that it was wise not to probe entrepreneurs on their finances. Many felt that these questions were too invasive and 'off putting'. It was advised that the introduction page made clear that such questions would not be included. Overall, the pilot group commented that the research topic was interesting but the difficulty would lie in getting the surveys filled-out, due to the excessive workloads of entrepreneurs.

### 3.5 Survey Response Rate

Using the Internet for survey data collection has been around since 1980 and it has drastically affected the amount of people accessible to researchers (Truell, 2003) Non response rates and item non response rates are a 'significant factor affecting the quality of survey/questionnaire results' (Denscombe, 2009) Response rates are significantly better with Internet based surveys compared to the 'pencil and paper' questionnaires (Denscombe, 2009 and Truell, 2003) The three mam factors affecting Internet based survey response rates include

- Lack of anonymity and concern of confidentiality
- Restricted access by Internet tools
- The type of question being asked (fixed choice factual, fixed choice opinion and open-ended) (Truell, 2003 and Denscombe, 2009)

The sample of individuals surveyed were all professionals in the ICT sector therefore, they were familiar with using the Internet and email. At no point in the study did participants voice confidentiality concerns. The cover letter preceding the survey explained to the entrepreneurs that questions relating to their finances would not be asked. This is a sensitive area of discussion with entrepreneurs and many are unwilling to delve into such detail. This study is based on personal educative experience and managerial competencies therefore financial information was not required.

Out of the 80 emailed surveys 22 were completed and 9 were restricted access by Internet 'spam' tools. These surveys were followed up in a paper format. Despite all efforts the potential participants could not spare the time to fill out the paper surveys. This showed an overall preference for Internet/email based surveys, due to the fast and uncomplicated usage.

As discussed previously the open-ended questions within the surveys are necessary for discovering the causal relationship between the variables. The majority of the questions designed for the survey were closed-ended questions with complementary open-ended questions (Appendix 2). In general, the decision to use closed-ended questions has now become vital for gaining successful response rates and avoiding unnecessarily burdening respondents. Respondent burden is described as

"The more effort a respondent needs to put into answering a question the less likely he/she is to complete the item" (Denscombe, 2009, p. 288)

Janes (2001) concurs with this belief, claiming that the longer it takes for the respondent to complete a question, the more likely it is the returns will show up small. One way to prevent small returns is to keep details on all respondents and 'track' their response rates (Jane, 2001). Throughout this study response rates were tracked and all potential candidates were sent a 'reminder email' which gently encouraged them to complete the survey. The reminder email acknowledged the possible burden of the survey given the entrepreneurs time constraints but also stressed the importance of their participation in the study. The reminder was sent within 7 days of a non-reply. The reminder email did not have the desired effect. Many of the respondents made the decision to complete the survey within a day of it being sent. Their decision to

participate in the survey was made almost immediately, any prompting there after proved fruitless

The 'validity' of the results presented in this study are believed to correspond with the how things really are thus, affirming the reality of an entrepreneur (Sale, Lohfeld, and Brazil, 2002) The sample is specific to SMEs in the ICT sector and is therefore representative of that particular population. The truth of the reality lies in how an entrepreneur perceives it. Studies must begin to understand the perceptions and attitudes of entrepreneurs, relating to education and training. If their attitudes are assessed then government, education and training organisations can begin to tackle any issues, surrounding the creation and promotion of bespoke education and training courses. Through such awareness the triangulation of such organisations both public and private can assist in the successful development of SMEs and entrepreneurs themselves.

### 3.6 Limitations of Research

### Population Sampling

This research identified 80 SMEs, within the IT sector, operating within County Dublin Out of the 80 questionnaires that were emailed 22 were returned Cross-sectional and cross-national samples would not have been possible given the time constraints of the research. The large sample size meant the probability of achieving more generalised results.

### Survey Fatigue

A common complaint amongst entrepreneurs is the volume and persistent requests from students and government bodies alike to participate in filling out questionnaires. The speed at which questionnaire's can be emailed and the relative low cost of creating a questionnaire presents the problem of 'survey fatigue' (Backor, Golde and Nie, 2007). These surveys were emailed in May, in order to avoid traditional holiday time.

### Time Constraints

Constructing the questionnaire and obtaining the personal email addresses of the entrepreneurs was time consummg. Waiting on the return of the many questionnaires also stretched the already constrained timeframe of this dissertation.

### Entrepreneurs Workload

Entrepreneurs are exceptionally busy and often undertake various different roles within their firm. The size of the SMEs sampled meant that the entrepreneurs surveyed were under pressure to complete their day-to-day tasks. A survey on top of the already widening workload may have appeared burdensome

#### **Restricted Access**

When the questionnaire was made ready for distribution some technical difficulties soon became evident. Some entrepreneurs who agreed to participate in survey could not as their email refused to accept the attached survey. The webmail filters designed to reject large or potential viral emails meant the survey failed to be distributed. Physical copies of the questionnaire were printed to overcome this problem. However, many potential participants felt they either could not spare the time and/or their time schedules were too turbulent to provide an amicable time to meet.

### 3.7 Chapter Conclusion

The methodology undertaken for this study was specifically chosen and implemented to maximise the completion of the objectives set out in Section 1.2. This study undertook an overarching quantitative approach to gathering data, whilst including an interpretivist approach to the open ended questions. The understanding of factual/numerical data was enhanced by the explanatory/causal reasons given in the survey by entrepreneurs. The survey was designed to include closed-ended and open-ended questions. Hence, by merging both quantitative and qualitative research methods, the study arguably shifts into the realm of the 'mixed method approach'. This method was chosen to add value to the study whilst enabling a greater understanding of the variables and their connections.

Out of the 80 entrepreneurs surveyed, a total of 22 completed the survey. The survey was administered online via email. The survey was designed as a writable PDF file which easily allowed for the collection and analysis of data, using spreadsheets and statistic creating tools. This allowed for complete control and manipulation of the design of the diagrams which are illustrated in the following Chapter 4.

# **Chapter 4: Presentation of Research**

# **Analysis**

In total, this research sought to survey 80 entrepreneurs with a completed 22 surveys returned. The surveys were administered over an eight week period, in order to maximise response rates and to avoid loss of applicants, due to the seasonal holiday period. As discussed previously, the questionnaire was broken up into 3 sections (see Appendix 2). The first section is an introductory phase, designed to ask general questions regarding the founding and size of the business. The entrepreneurs were also asked briefly about the impact the recession has had on their business. The second section 'Entrepreneurs Education' and third section 'SME Management & Development' incorporate the mam focus of this study. This chapter will illustrate the results of section one, two and three the relevance of the results will be discussed in Chapter 5 and six to enhance future research needs and topics.

### 41 Results of Section One of the Survey Introduction

In the overall 22 responses obtained from Irish SMEs within the ICT sector, a total of 21 (95%) of the entrepreneurs were male with only 1 (5%) female. This shows a clear predominance of the male gender in the entrepreneurs of the ICT sector.

The entrepreneurs were asked about the existence of an influence of the recession in their businesses. Figure 4.1 represents the percentage of companies affected by the recession. Out of the 22 SMEs surveyed, 73% stated that they have been affected by the recession whereas the remaining 27% stated that they have not been affected by the recession. Out of the companies not affected, four of them are micro (1-9 employees) companies founded during the recession and two small (10-29 employees) founded before the recession.

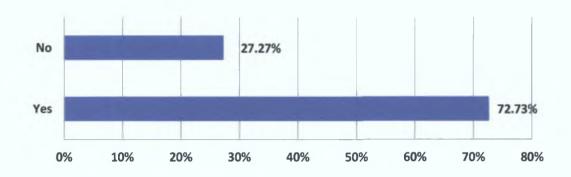


Figure 4.1: The percentage of companies affected/not affected by the recession

Figure 4.2 depicts the business areas which have been affected by the recession. The vertical axis depicts the average impact level in each area which ranges from 1-5, where each number corresponds to a quantitative value. The relationship between the numerical and quantitative values is given in Table 4.1. Access to finance, expansion, sales and marketing are most affected by the recession. IT and the creation of new products remain slightly affected.

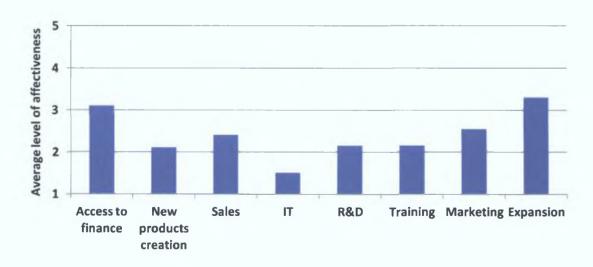


Figure 4.2: Impact of the recession in SMEs business areas

Table 4.1: Number scale and equivalent quantitative values used in first section of the survey

Numerical value	Quantitative value	
1	Not affected	
2	Slightly affected	
3	Averagely affected	
4	Substantially affected	
5	Mostly affected	

From the results obtained in Figure 4.2, a more detailed analysis can be conducted by dividing the SMEs by their year of foundation (prior to recession vs. during recession) and by their size (small companies vs. medium companies). For both cases the same impact scale expressed in Table 4.1 is used.

Below Figure 4.3 compares the repercussion of the recession on SMEs founded prior to the recession and those founded during the recession. The blue bar represents the SMEs founded prior to the recession and the red bar reflects the SMEs founded during the recession. The chart shows that both groups were similarly affected in business areas such as: access to finance, new products creation, sales, IT and R&D. However, in the areas of training, marketing and expansion the companies founded prior to the recession were more affected than those funded during it. In both cases, the access to finance and the expansion are the most affected areas of business.

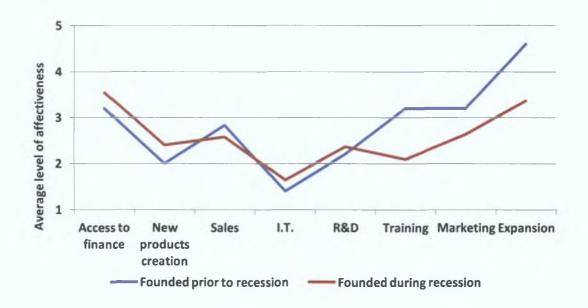


Figure 4.3: Impact of the recession on SMEs founded prior to and during the recession

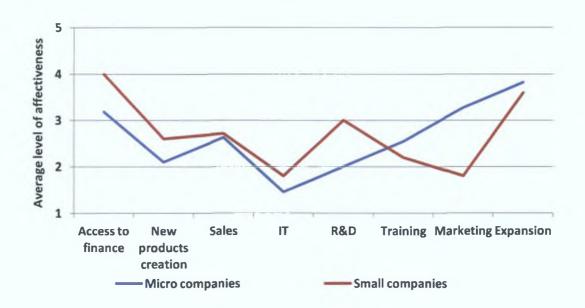


Figure 4.4: Impact of the recession on SMEs founded prior to and during the recession

Above Figure 4.4 shows the effect of the recession on the micro (1-9 employees) and small (10-29 employees) companies. Overall, the effect of the recession is greater on the small companies than on the micro ones, excluding the areas of marketing and expansion. In conjunction, the small SMEs founded prior to the recession are struggling the most with access to finance and the expansion of the company being the most problematic areas.

When comparing these results with the companies that did not declare themselves affected by the recession. The results show that two small companies founded prior to recession, which remained unaffected had reached a high level of expansion, with 20 employees each. Therefore, the micro and small SMEs founded prior to the recession which failed to grow and expand are now struggling more than their counterparts.

### 4.1.1 Concluding Remarks on Recession Related Issues

The recession has affected the majority of the SMEs, with access to finance and expansion listed as the most prevalent problems and most affected areas of the business. The SMEs which were founded prior to the recession and failed to expand are the most affected. The companies which did expand have stated that the recession did not affect their business. This reflects the importance of development for SMEs.

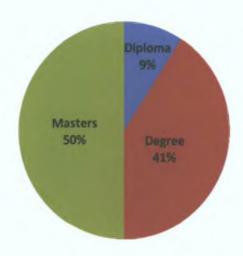


Figure 4.5: Entrepreneurs obtained education level

Notably, there is a gender divide within the ICT sector with 95% of the entrepreneurs being male and 5% being female. The above areas are discussed further in Chapter 6, as the results have uncovered patterns which may warrant further investigation relevant to future research.

## 4.2 Results of Section Two of the Survey: Entrepreneurs Education

In Section 2 of the survey the respondents were asked to tick the highest level of education they had obtained. The entrepreneurs were given eight different options to choose from including; primary school, junior certificate, leaving certificate, diploma, degree, masters, P.H.D. and other. Eleven of the entrepreneurs had achieved a master's level in education, nine had completed a degree and two had finished a diploma. Figure 4.5 depicts that up to 50% of entrepreneurs have achieved a masters and a level 9 qualification within the Irish education system. This particular group of entrepreneurs are highly educated. Notably, this may not be the case across other sectors of the SME industry.

The respondents were then asked to list the three core skills which they believed they obtained from their education. After closely analysing the answers a clear pattern began to emerge. The overall results showed that entrepreneurs listed similar core skills which they believed they had obtained throughout their education. When totalled, these core skills were broken down into five main sections which including:

technical skills, interpersonal skills, business & management skills, analytical skills and financial skills. The results are illustrated in Figure 4.6.

The 17 (30%) respondents rated 'technical' skills as one of the core competencies they obtained from their education. This followed strongly by 'interpersonal' skills which 15 (27%) entrepreneurs listed as a core skill. 'Business and management' related skills also rated highly with 14 (25%) of entrepreneurs listing it as a core skill. The above three skills reflect the three core skills which the respondents believe they gained through education. A further 6 (11%) respondents listed 'analytical' as a skill which they obtained followed by 4 (7%) of the respondents who stated that 'financial' skills were among their skill-set.

Following on the entrepreneur education and skills learning path, they were then asked: 'Are these skill sets more business or technology related?' The overwhelming majority (76%) of entrepreneurs stated that their skills were more business related with a mere (24%) claiming that their skills were more relatable to technology. Despite the fact that technical skills rated highly amongst many of the respondents' core skill-sets, majority of entrepreneurs believe their skills to be business related. In total 14 respondents felt that the skills obtained throughout their education positively impacted upon their business.

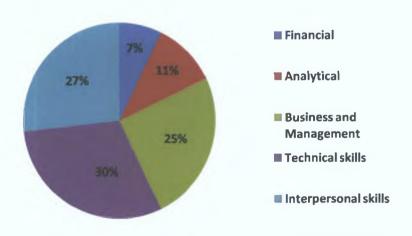


Figure 4.6: Entrepreneurs core skills obtained through education

One respondent commented that his education contributed

"Hugely I feel I have accumulated a good balance of being both technically conversant and appreciative of how to develop business models around the deployment of technology"

Self confidence in ones abilities, as a result of education, was repeatedly described Entrepreneurs commented that their education gave them 'the confidence to question the direction' of the business and 'identify the niches that we operate in' A second respondent claimed that it

"Gave me an ability to speak with investors, banks, employees, clients in a manner that gave them confidence in dealing with me"

The development, management and implementation of projects were also reoccurring responses. The third respondent claimed that his education gave him 'a good understanding of project management and how to manage a team of employees' whilst another participant stated it taught him 'how to deliver a project in strict deadline'. A fourth such entrepreneur claimed that his educational background gave him

" experience in building projects and ensuring that they met or exceeded the initial specifications"

A total of 8 respondents felt that their education had 'little or no impact' on their business Others took a more holistic approach claiming that

"Education was a good grounding but not a huge contributor in terms of business success"

The fifth respondent stated that

"Formal 3rd level education was just a basic platform to gain employment and initiate a career"

A sixth entrepreneur claimed that education 'coupled with experience is helpful' but 'experience is key'. The seventh respondent believed that the skills required to be a successful entrepreneur must be 'learned on the job'

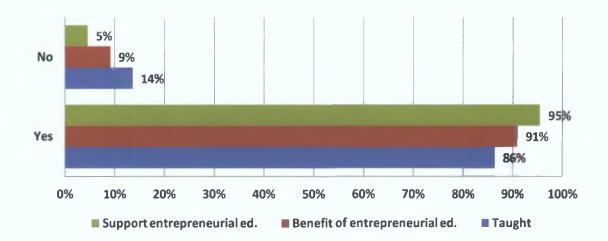


Figure 4.7: Respondents attitudes to entrepreneurial education

Figure 4.7 is an accumulative graph representing the three final questions in section two of the questionnaire. The blue coloured bar reflects the answers given for Question 2.5 which asked: 'In your opinion can entrepreneurship be taught?'

The red coloured bar reflects the answers given for Question 2.6 which asked: 'As an entrepreneur, do you feel you would have benefitted from some form of Entrepreneurial Education?'

The green coloured bar reflects the answers given for Question 2.7 which asked: 'Have/would you be willing to support entrepreneurial education initiatives by offering your own knowledge and experience to budding entrepreneurs?'

All the above questions requested a closed yes or no answer. This variable is represented on the vertical side of the bar. The horizontal bar is a percentage gauge. The overall accumulated responses are provided in percentage format at the end of each coloured bar.

For question 2.5 a total of 19 (86%) of respondents believe that entrepreneurship can be taught. Only 3 (14%) of respondents disagreed. One respondent felt it necessary to expand on her reason for answering 'no'.

Question 2.6 also received a positive backing. Despite some of the respondents previous answers, regarding the perceived lack of impact, education has had on their business, 20 (91%) entrepreneurs believe that they would have benefitted from some form of entrepreneurial education. By contrast, a mere 2 (9%) of respondents, felt that they would not have benefitted from a specific form of education.

Question 2.7 is reflective of the entrepreneur's willingness to participate in educational initiatives to enhance the learning of students and entrepreneurs. A total of 21 (95%) entrepreneur's voted yes to supporting entrepreneurial education. Only 1 (5%) respondent voted no. This is a positive response to what could be the future of student/entrepreneurial education.

### 421 Concluding Remarks on Entrepreneur Education

The 22 entrepreneurs surveyed in this study have achieved high third level educational qualifications. The pie-chart on figure E illustrates that a 50% of the respondents have a master and 41% have a degree. As stated previously, the high level of education achieved by the entrepreneurs may be specific to the ICT firms with the SME sector. This may also have influenced the entrepreneur's perceived core skills which they obtained throughout their education. A total 30% of entrepreneurs gained technical skills, 27% included interpersonal skills and 25% revealed business and managerial related skills as a core competency. These results are reflective of the core skills required to operate an SME in the ICT sector. However, when asked if their skills were more technical or business related, a majority of 76% stated that their skill-sets were more relative to business. This contradicts the perception of entrepreneurs in the ICT sector. It is presumed that those operating an SME, in the ICT sector, must have extensive technical abilities. These results show that it is business related skills that continue to prevail even in a hi-tech sector.

Overall, the results have yielded a positive response to entrepreneur education in both the 'real world' business operations and academia. The majority (86%) of the respondents believe entrepreneurship can be taught. A considerable 91% of entrepreneurs believe that they would have benefitted from some form of entrepreneurial education. Finally 95% of all respondents stated that they would be

willing to participate in educational initiatives. These positive results are a testament to the benefits of education. The challenge now lies in the developing educational and training courses to meet the needs of current and budding entrepreneurs.

# 4.3 Results of Section Three of the Survey: SME Management & Development

The third section of the survey was aimed, firstly, to benchmark the entrepreneurs understanding of their management skills which are important for evaluating the effect it may have on the development of the business; and secondly, to analyse the intentions of the entrepreneurs to develop strategic initiatives.

Firstly the entrepreneurs were asked about the managerial style which better characterized them. Figure 4.8 depicts the managerial style which the respondents felt was most descriptive of their own. The most prevalent style 'coaching' was chosen by 12 (55%) of the respondents. The second most popular management style 'democratic' was chosen by 6 (27%) of the entrepreneurs. A total of 3(27%) respondents chose the 'authoritative' style and only 1(4%) chose a 'coercive' style of management. The dictatorial style received no rating. The most popular managerial style of 'coaching' which was chosen by the respondents is reflective of the size of many of the SMEs. The need for more stringent managerial styles such as 'dictatorial' and 'coercive' are generally associated with larger firms. Smaller firms often utilise an informal styles of management as depicted in the pie chart above.

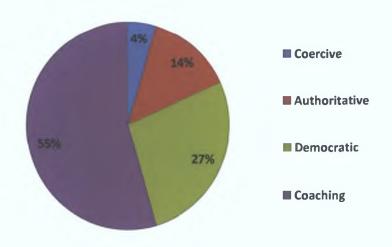


Figure 4.8: Entrepreneurs self-described managerial style

The following question was designed to test whether the respondent subconsciously believed him/herself to be a leader or a manager A list of ten characteristics, specific to both leaders and managers, was compiled equally. The respondent was asked to choose 'five' of the 'personal characteristics' which best described them. The results showed that 14 (68%) of entrepreneurs chose all five characteristics which are associated with that of a leader. The characteristics include, innovative, charismatic, future focused, good communicator and decisive visionary. A total of 8 (32%) of entrepreneurs chose the characteristics of a manager. Entrepreneurs perceived their personal attributes to be more closely associated to that of a leader than of a manager. Therefore, if entrepreneurs consider their role to be that of a leader then they may disregard the necessity to train as a manager.

The respondents were also asked to rate the general management skills amongst Irish SMEs under the descriptions poor, inadequate, average, good and excellent Management skills in Irish SMEs were rated as 'average' by 10 (45%) of the respondents One respondent explained his decision as

"Skills are acquired through experience and willingness to learn there has to be an ability to recognise an individual's strengths and weaknesses together with the willingness to change Management in SME can be a lonely place Networking groups are vital for support I think we do our best given constraints of time and other essential resources"

A further 8 (36%) entrepreneurs rated the management in Irish SMEs as 'good' Respondent number two stated that

"I think management skills in Irish SMEs are quite good Irish managers tend to build consensus and avoid confrontation"

A total of 2 (9%) respondents, rated the management skills within Irish SMEs as 'poor' The descriptors 'inadequate' and 'excellent' both received 1 (5%) vote each The respondent who scored the management skills among Irish SMEs as 'inadequate' stated that

"There is a big problem with how these businesses are organised SMEs are constantly fire-fighting, too busy chopping to sharpen the axe. They don't know

what can be done and what organised looks like. Broad business requirements make it impossible to do it well. Some sort of co-operative support structure might help."

Having assessed the general condition of management within Irish SMEs the entrepreneurs were then asked to assess their own functional management skills within various areas of their business. As in the first section of the survey, a set of numerical values were used to collect the quantitative data in the answers. The relationship between the numerical scale and the quantitative values for the questions in the third part of the survey are given in Table 4.2.

Figure 4.9 depicts the results for Question 3.4 in a bar chart format. The vertical scale on the left side entitled 'average rating' depicts descriptive titles each of which is given a specific number. The horizontal scale lists the areas of the business in which the entrepreneur was asked to rate his/her functional management skills.

Table 4.2: Number scale and equivalent quantitative values used in the third section of the survey

Numerical value	Quantitative value
1	Poor
2	Inadequate
3	Average
4	Good
5	Excellent

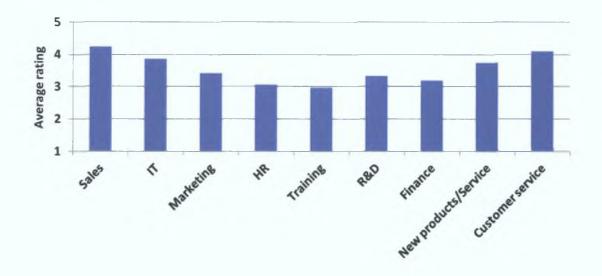


Figure 4.9: Entrepreneurs functional management skills

The results show that respondents perceive their functional management skills to be most effective (good) in the areas of 'sales' and 'customer service'. These results are concurrent with the view that SMEs have bespoke products and individualised customer service regimes. The second highest areas which entrepreneurs manage most efficiently are 'IT' and 'new products/ services'. SMEs are traditionally criticised for their poor proficiency and non-use of hi-tech equipment. However, the rate of these two qualities just below good may be a result of the ICT sector of the entrepreneurs surveyed and may not be cross-sectional. The areas of 'marketing', 'HR', 'training', 'research & development', and 'finance' each rate just under or over the rating average. This result proves that there are many areas which require improvements in effective management.

The area of finance has often been highlighted as a problem for many SMEs. Areas of HR and training have received much attention by academics as it is often an area of neglect by owner-managers. Notably, the idea of 'bias' intrudes here as these ratings are representative of the entrepreneurs own managerial effectiveness. In the following paragraphs this specific issue is addressed.

Figure 4.10 depicts the results for Question 3.5 in a bar chart format. The vertical scale on the left side entitled 'average rating' depicts descriptive titles each of which is given a specific number. As in Figure 4.9, the numerical scale given by Table 4.2 is used. The horizontal scale displays a list of typical managerial duties. The respondents were asked to rate their level of efficiency against the designated managerial duties. The highest scoring managerial duty is 'crisis management' which the respondents gave an efficiency rating of 4 (good). The second highest 'efficiency' ratings were afforded to tasks surrounding 'project management', 'delegation' and 'innovation'. These tasks were rated highly by the respondents scoring just below the rating number 4 (good). Managerial efficiency in the tasks of 'organising' and 'company culture' were given a rating of 3 or just above the average. Scoring slightly below with a rating the above tasks were 'planning' and 'quality control'. The managerial duty of 'controlling' received the lowest scoring with a rating of 3 (average). Most of the duties received a rating of 3 (average) or above. The highest scoring duty 'crisis management' coincides with the turbulent environment in which many SMEs operate in. None of the management tasks listed received a rating of 'poor' or 'inadequate'.

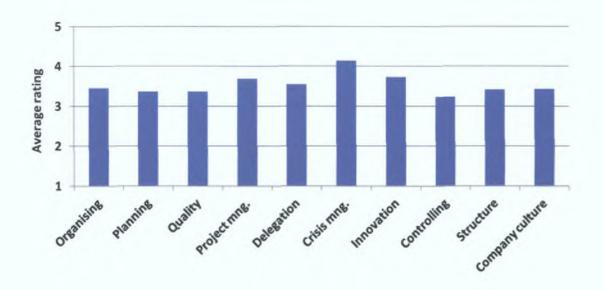


Figure 4.10: Efficiency of management skills

Question 3.6 asked 'Did you undertake any management training? If yes, when?' A total of 14 (60%) of respondents answered 'yes' and a significant proportion of 8(40%) stated 'no'. When probed further the entrepreneurs who voted 'yes' stated that the management training which was received was completed 'a long time ago'. Question 3.2.6 asked the respondents 'what form of training did they complete?' Three respondents had completed an Irish Management Institute (IMI) management training course and a further five candidates had achieved a Master in Business Administration (MBA). Others stated their management training was conducted with previous companies through 'in-house' training and 'life/work experience'. Several respondents stated that their management training took place 'a long time ago'. One candidate commented that the he training received was in the 1980s. The proficiency of such management training may be called into question given the extensive amount of time which has elapsed since the last session and the duration of the 'in-house' training sessions.

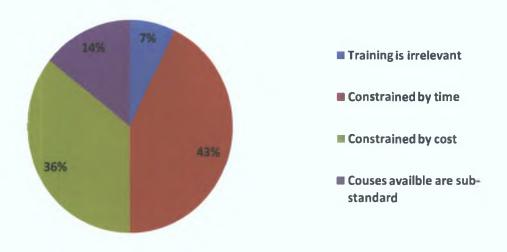


Figure 4.11: Barriers to management training

To enhance the previous answers the entrepreneurs were asked 'what barriers to management training most applied to you?' The options available for selection were; 'training is irrelevant, constrained by time, constrained by cost, not locally available, course topics don't apply to SME managers, and courses available are sub-standard'. Figure 4.11 depicts the percentage weighting of the 'barriers' selected by the entrepreneurs. The respondents answered with 43% stating that time as a constraining factor is the greatest barrier to management training. This was followed by 36% of all entrepreneurs stating 'cost' as a barrier to management training. A further 14% believed that the courses available are 'sub-standard' and 7% maintained that the management training available is irrelevant. No votes were received for course topics being inapplicable and not locally available. These answers are concurrent with much of the academic literature. SMEs often state time and cost as constraining factors or barriers to management training. Management training courses which are currently available for SME owner-managers have been criticised for being sub-standard and non specific to SME owner-manager needs. These results reflect that whilst there is no shortage of training courses, the content remains irrelevant.

Question 3.7 asked the entrepreneurs 'which course provider would they prefer to learn from?' The options provided were state agency course provider, third level institutes and private run courses. A total of 11 (48%) respondents opted for 'private run courses' whilst 9 (43%) choose 'private run courses'. A mere 2 (9%) choose the

state agency course provider as their preferred source of training. These results reflect a lack of faith and support for state agency course providers.

Figure 4.12 displays two relatable questions both of which question the conscious strategic initiatives of the entrepreneurs. The blue bars represent Question 3.8 which asked the entrepreneurs if they have a future focused, strategic development management plan. The red bars reflect the answers given for Question 3.9 which asked the respondents if they currently avail of any strategic HR training initiatives. The horizontal axis presents the respondents answers through a percentage scale. The vertical axis contains both 'yes' and 'no' scales. The total percentage of the respondents answers are displayed at the end of each bar. Both questions relate to the strategic initiatives which the entrepreneurs may or may not be utilising within their SME.

When asked did they have a strategic development management plan 12 (55%) of the respondents stated 'yes' and a significant 10 (45%) ticked 'no'. When asked to explain their reasoning some of the respondents who voted 'yes' and stated that they did have a development management plan gave their reasons.

Some of the reasons presented were:

"Because it is a requirement for any business to understand where they are, where they want to get to and how they intend to go about getting there. Otherwise you're just stumbling from one tactical task to another."

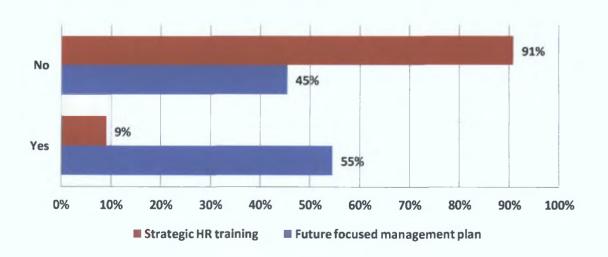


Figure 4.12: Strategic initiatives

### A second entrepreneur commented that

"Very little time is spent on the present and most time is spent on the future within a business focused environment"

The common belief amongst those who claimed to have a strategic management plan is generally, 'fail to plan, plan to fail' and without a strategic management plan 'you don't have an overall objective'

The entrepreneurs who stated that they do not have a strategic management plan also gave their reasons. One respondent stated that they are

"Too busy chopping trees! Seriously we are busy overcoming business viability issues. Vision and big picture are in my head. If we overcome next period of organic growth and overcome immediate technical learning curve and business challenges, the sky is the limit."

### A second respondent commented that

"The IT landscape is changing very quickly and plans changes just as quickly
The main reason is due to time constraints particularly as these plans need to
be made in conjunction with other company directors and making time to set
out plans is difficult"

All the answers placed in the 'no' category stated 'time' as an reason surrounding the lack of development and implementation of plans. One respondent claimed 'I have the plan in my head but I haven't got the time to develop anything formal'. Others claim that firm size, the turbulent environment and lack of finance are the reasons behind lack of planning. The core issue appears to be 'time' as a constraining factor which influences not only access to management training but the ability to formally plan strategic initiatives.

The red columns in Figure 4.12 illustrate the answers given to Question 3.9 which asked the respondents if they avail of any strategic HR training initiatives. A total of 20 (91%) respondents stated 'no' and a mere 2 (9%) of respondents stated 'yes' they did have a HR training initiative. One respondent commented that

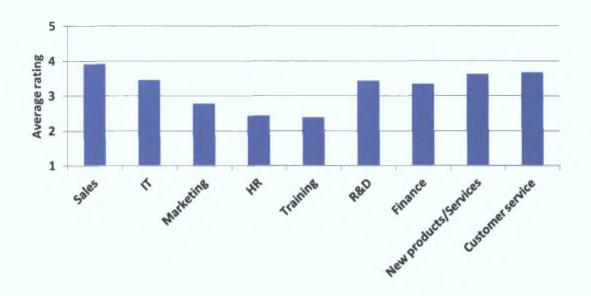


Figure 4.13: Developmental status of business areas

"...the focus is on sustainability which means we're slightly less structured and a little more chaotic than other more established organisations and so HR training initiatives are not top of our priority list right now."

The core reasons for not having a HR strategic plan are: 'it is not an urgent priority', 'time as a constraint' and 'the firm size is so small that HR training is not applicable'. Overall the introduction of HR training initiatives remains significantly low, even compared to the implementation of a strategic development management plan.

Following the questions, relating to the strategic initiatives of the SMEs, the entrepreneurs were asked to rate the current developmental status of several areas within their business. The entrepreneurs were asked to rate the following areas: sales, IT, marketing, HR, training, R&D, finance, new products/service and customer service. Figure 4.13 depicts the results of the developmental status of businesses.

The left axis entitled 'average rating' ranges from 1-5 according to the equivalencies in Table 4.2. The horizontal axis displays the various areas of the business which is being measured in terms of its developmental status.

The highest scoring area which respondents rated as 'significantly developed is 'sales'. This is followed closely by IT, R&D, new products/services and customer service all of which scored above average in terms of development. The lowest

scoring areas include marketing, HR and training all of which received a number 2 rating of inadequately developed or slightly above. The low development rating for HR and training coincide with the answers give previously. HR appears to be a significantly neglected area within these SMEs. Sales, IT and customer service have consistently rated highly throughout all charts. These areas appear to be the primary focus of these SMEs. These areas which remain a common fixation are reflected in the developmental stage of the SMEs which were questioned below.

Finally, Question 3 11 asked the entrepreneurs to choose a developmental stage which best described their SME. The options which were given include start-up, expanding, maturity and diversification/stability stage. Start-up SMEs rated significantly with 41% or 9 of the SMEs currently at this status. A total of 12 (56%) of SMEs are 'expanding' and only 1 (5%) of the SMEs has reached the optimum level of 'diversification/stability'. When questioned, what stage in the developmental process, the respondents expected their SMEs to reach in 5 years time, many gave concrete and realistic answers. Most entrepreneurs anticipated the next stage in the developmental process. Many of the start-up enterprises are working towards an expansion stage of development. The ambitions of the entrepreneurs in the expansion stage appear to be vaster though solid. One entrepreneur commented that

"We expect to be expanding for the next 5 years but with age will come a level of maturity particularly in our product sets. We expect to remain in this particular vertical but to broaden our offering across the vertical thus providing more products but off a more solid financial base than we have today"

Not all entrepreneurs are ambitious for the sake of maintaining ownership of the company A second respondent commented that

"We need to be in a position where our turnover is approaching €2 5m and we are formulating an exit strategy through the sale of the company"

This entrepreneur is 1 of 4 respondents who are working towards expanding the business in order increase its viability and sell it. Irish SMEs are often critiqued for

'thinking small' and selling on their ideas to larger companies. There is some evidence here to support that ideal

### 431 Concluding Remarks on SME Management & Development

Many of the results in the third section of the survey remain concurrent with the current beliefs regarding SME management and development. The management skills of the individual entrepreneurs appear to be exceeding the expectations of many critics. However, many of the business areas were managed 'averagely' thus proving a lack of efficiency in many 'problem areas of SMEs such as HR and training. The implications of this will be discussed and drawn upon in Chapter 5. The following chapter will draw upon these results and relate them back to the current ideologies and theories discussed previously in the literature review.

### 44 Chapter Conclusions

In conclusion, the main findings of this chapter are

- The majority of entrepreneurs in the ICT sector possess a third level qualification A total of 50% have a master, 41% have achieved a degree and 9% have completed a diploma
- The three core skills which the entrepreneurs developed through their education are 30% technical skills, 27% stated that their interpersonal skills were developed and 25% included business and management skills as a fundamental competency
- The initiative of 'entrepreneurial education' received a positive response A total of 86% of respondents believed that entrepreneurship can by taut An overwhelming majority of 91% stated that they would have benefitted from some form of EE Further, 95% of entrepreneurs stated that they would be willing to support entrepreneurial education initiatives by offering their own knowledge and experience to students/budding entrepreneurs
- The top three self reflective management styles included coaching (55%), democratic (27%) and authoritative (14%) Both the coaching and

- democratic styles of management reaffirm the theoretical ideologies that small SMEs use an informal or less controlled management styles than larger organisations
- The results revealed that 68% of entrepreneurs believe they display personal characteristics which are most relative to that of a 'leader' A total of 32% of entrepreneurs believe their personal characteristics reflect that of a manager. These results also reflect common observations of entrepreneurial characteristics which are believed to be closely related to those of a leader. However, if entrepreneurs perceive themselves to be leader and not a manager than they may disregard the necessity to participate m management training.
- Overall the entrepreneurs rated the general management skills amongst Irish
   SMEs as average (45%) Another 36% of respondents rated the skills as good
   and 9% believed they were poor
- The entrepreneurs than rated their own management skills in various different areas of the business. The results showed that entrepreneurs rated their management skills highly in the areas of 'sales' and 'customer service' as good. The areas which received a below average rating are 'HR' and 'training'
- The entrepreneurs rated the efficiency of their managerial functions. The functions which received the highest ratings are 'crisis management', 'project management', 'innovation' and 'delegation'. These were given a rating of 4 (good). The managerial functions 'planning' and 'quality control' received a below average rating.
- A total of 60% of managers had participated in some form of management training. The remaining 40% had no management training.
- Out of the 22 SMEs surveyed 56% were at the development stage 'expanding' and 41% were 'start-ups'

# **Chapter 5: Research Findings**

After reviewing the literature, it is evident that SMEs are vital for Ireland's economic prosperity and prospective employment (Enterprise Ireland, 2012). However, the internal and external environments in which SMEs currently operate are turbulent and unstable (OCED, 2009). The serious tightening of credit conditions and sharp decline in demand for goods has meant entrepreneurs must now utilise their knowledge and management skills to maximise their advantage in the competitive markets (OCED, 2009).

# 5.1 Relationship of Results to Research Objectives

#### 5 1 1 Entrepreneurial Education

This research set out to explain what/if any possible relationship an entrepreneur's education had on the success and subsequent development of their business. The results support and challenge some of the ideologies surrounding EE

The results support Bosworth's (2009) ideology that highly educated people are more likely to be the founders of high growth business. Each entrepreneur surveyed in this study had completed some form of third level qualification ranging from diplomas to masters level courses. The results also support Bosworth's (2009) ideology which

states that EE presents entrepreneurs with transferable attributes including communication skills, confidence and the ability to construct water-tight business plans

The following comments support, Bosworth's (2009) specified transferable skills, obtained through education One entrepreneur commented that

"The skills gave me the confidence to question the direction of the business and to help identify the niches that we operate in "

A second entrepreneur also commented that education gave him the confidence to deal with a multitude of different people

"Gave me an ability to speak with investors, banks, employees, clients in a manner that gave them confidence in dealing with me"

A third entrepreneur stated that education gave him

" the ability to analyse an opportunity and exploit the opportunity"

Overall, the three core skills identified from the entrepreneur's education are technical, financial and interpersonal skills. The entrepreneurs believe that the skills which they obtained from education are more technological than business related These results support Kozlinska's (2011) definition of EE which describes an individual as possessing 'a range of essential skills' to make a 'creative contribution' in the worlds of work. The results support the basic principle of a knowledge economy, which considers 'knowledge' to be a fundamental resource (Vertrivel, 2010) The findings illustrate an enormity of support for EE The entrepreneurs positively associate the skills they obtained from their education, as a core contributing factor, to the success of their business. However, the entrepreneurs in this study firmly display 'single loop' learning which refers to the entrepreneur's capacity to learn from their mistakes and conduct new efficient methods conducting business (Van Gelderen et al 2005) This opposes the more proactive 'double loop' learning which represents a more proactive approach to learning (Van Gelderen et al 2005) In the latter part of the study the entrepreneurs commented that they are too busy 'firefighting' to actively participate in training courses. The owner-managers attitudes to

learning support Matlay's (2005) understanding of 'learning' which states that 'learning in both time and scope is beyond the capabilities of an academic business school' Whilst many of the entrepreneurs positively back EE, they neglect formal continuous learning, in favour of informal on-the-job experience. The attitudes of the entrepreneurs also support, Van Gelderen's et al. (2005) understanding of 'learning', which is described as the outcome of both personal and situational determinants. The findings conclude that practical experience is equally as important as EE. The comment below supports the ideology that education provides a solid basis from which a firm can be created but experience is also a vital form of learning (Raffo et al. 2000). One entrepreneur stated that the skills obtained throughout his education did contribute to the success of his business but alone.

"Probably not a lot, but coupled with experience they were helpful but experience is the key"

Overall, the findings positively support EE The entrepreneurs do believe that entrepreneurship can be taught and they also state that they would be willing to participate in EE initiatives, by offering their knowledge and experience, to budding entrepreneurs The findings show a shift in ideals from 'old entrepreneurship', an 'inherently selfish notion of individual enterprise', to new entrepreneurship were the entrepreneur provides services of wider social value (Rae, 2006 2011) The results support the ideology that an enterprise culture can cultivate entrepreneurs and can stimulate the supply of entrepreneurs into society through education (Bosworth, 2009 and Jones, 2010)

### 5 1 2 SME Management and Development

This study sought to evaluate the entrepreneur's management skills and abilities throughout various areas of the SME Identify barriers to management training and analyse what/if any future strategic managerial initiatives and human resource goals there may be

The findings in this study correlate to Van Vugts (2006) evolutionary theory of leadership. The results prove that the entrepreneurs in this study predominately view

their role to be closest to that of a leader and not a manager Entrepreneurs are often the sole decision makers in SMEs thus, deciding core functions such as what to do, when do to it and where to do it, all of which coincides with Van Vugts (2006) evolutionary theory of leadership

The entrepreneurs state that time and cost constraints are the main factors affecting their ability to participate in management training. They lack the same 'resource slack' which larger firms have at their disposal (Kelliher, Foley and Framptom, 2009). Wightman and McAleer (1995) claim that entrepreneurs are 'notoriously negative' towards training programmes. The data shows that the majority of entrepreneurs are not adverse to the idea of management training. However, the results depict a preference for on-the-job learning. Experience is considered to be a key learning tool for many of the entrepreneurs. This supports Greys (2006) theory that the training within SMEs remains relatively informal. The entrepreneurs suggest that on-the-job training is a significant learning tool however, it remains unknown if these 'experiences' are formally assessed in terms of learning outcomes. The results conclude that the formality of training increases as the SMEs develop. This supports Hoque and Bacons (2006) theory that the level of training increases as the SMEs grow.

The entrepreneurs rate 'crisis management' and 'innovation' as their most efficient areas of management. This suggests that the SMEs are 'reactive' to the turbulent external environment as stated by Grey (2004) and Gilman and Edwards (2008)

The firms which were founded pre-recession and successfully expanded are not affected by the recession. The SMEs which were also founded pre-recession and failed to expand are most affected by the recession. This supports Gray's (2004) theory that SMEs which are growth adverse are proven to have lower resilience to the harsh external environment.

The results show that the levels of strategic and HR planning within the SMEs are poor Recently founded micro SMEs are too busy trying to survive to consider the future plans of the business. The larger SMEs have taken the time to plan strategically and are considering the assistance of HR practitioners. These results oppose the theory

of Walker and Tobais (2006) which states that firm size does not affect the levels of HR strategic planning

#### 5.2 Generalisation of Research Findings

A total of 80 SMEs were surveyed for this study, with a total response rate of 22 The difficulties in gaining a larger response rate were outlined in Chapter 3 Methodology section. Despite these challenges the research captures a detailed and complete analysis of the 'entrepreneur's education' and 'management skills' in the ICT sector of SMEs. The intimate survey asked specific questions relating to the research topic. These answers were further illustrated through the answers given in the open-ended questions.

This study offers a small but detailed analysis of Irish entrepreneurs within the ICT sector. This study illustrates the SME owner's attitude to learning and management training amidst a recession. The findings display a causal relationship which can be drawn between EE and managerial skills. Upon analysis the answers given were definitive thus, reaffirming some academic ideologies and introducing new areas of research for consideration.

#### 5.3 Implications of Research

#### 5 3 1 Entrepreneurial Education

The results depict the level of education reached by the entrepreneurs. The core skills which the entrepreneurs attain from their education give a clear indication of the learning outcomes achieved. The results indicate that upon implementation these skills can contribute to the success of a business. The three core skills include technical, financial, and interpersonal. The entrepreneurs in this study believe that entrepreneurship can be taught and they also believe that they themselves would have benefitted from some form of EE. For academic institutes and course providers, this offers a clear indication of the benefits of education. The entrepreneurs also stated that

they too would be willing to support such initiatives by offering their own knowledge and experience to budding entrepreneurs. These results provide positive backing for EE Educators can consider a new design and implementation of EE courses which can include the participation of experienced entrepreneurs direct from industry. The results illustrate a new possible way of student learning and course formatting.

#### 5 3 2 SME Management and Development

The majority of entrepreneurs chose their personal characteristics to be most like that of a leader This is a worrymg trend for those providing management courses. If an entrepreneur perceives him/herself to be a leader and not a manager, than they may disregard the idea of management training in favour of other courses which may not be as applicable to the needs of the business. Overall, the management skills amongst Irish SMEs rated as average, which may prove insufficient in such a hostile and turbulent economic environment HR and training are the most neglected and unmanaged areas of the business This will pose a serious issue as the SMEs develop Poor recruitment and lack of training can affect the profitability and increase turnover rates in a business. The entrepreneurs rated their ability to manage crisis highly. This is reflective of the current economic environment which proves that business survival is at the core of SMEs operations. The functional management skill of 'planning' received the lowest rating The entrepreneur's preoccupation with present issues has resulted in a failure to strategically plan for the future. This creates cause for concern Ireland needs its SMEs to remain functional and competitive both in national and international markets. The entrepreneur's failure to create and develop future strategic goals will result in lack of development and poor profitability. Most essentially, lack of planning will have a negative impact on job creation which is fundamental to Ireland's economic growth The Irish government, educational and enterprise bodies must reflect upon and counteract this problem. The importance of planning within SMEs must be iterated through campaigns, seminars and courses

A significant proportion of entrepreneurs have received no specific management training. The entrepreneurs rely on their third level education to suffice for management training. Both time and cost are the main barriers to management training which further concur with academic literature. Ways to overcome these

barriers must be investigated Education can also play a part in the resolution of this issue. Curriculums can be carefully revised to include work experience for students. This idea was introduced in an engineering college in France which created a development programme for SMEs and allowed the students to implement it on behalf of the entrepreneur (Mustar, 2009). This idea requires trust on behalf of the entrepreneur and commitment on behalf of the student. Incubation centres for developing SMEs are located in almost every national college in Ireland. The foundation of the relationship between colleges and SMEs has already been build. Finessing the details and revising curriculums will be a significant hurdle. This is not a permanent solution to a complex developmental problem. However, this is a mutually beneficial arrangement, business students will gain valid work experience and the entrepreneur will gain new and efficient processes.

# **Chapter 6: Conclusion**

#### 6.1 Validity of the Research

The validity of any research rests upon response rates and the level of 'contaminated answers' (Saunders, Lewis and Thornhill, 2007) This refers to non-uniform responses which are often found in the answers to open-ended questions 'Validity' assists in identifying whether the research results are 'really about what they appear to be about' (Saunders et al 2007) The validity of this survey is found in the statistical results which reveal stark contrasts between the variables. The answers which were presented in the open-ended questions generated exacting results due to the repetitive similarities between each comment. Common themes were derived from these results which enhanced the validity of the research. The survey was designed for a very specific group of individuals and the questions were grouped and ordered sequentially. The questions were worded carefully to maximise accuracy of answers and reduce any possible 'contamination'. The pilot test also helped identify any potential flaws in the questionnaire.

#### 6.2 Reliability of the Research

This research took an epistemological approach thus, seeking the elements which constitute or contribute to the development of an SME. The survey was designed to

gain an insight into the current state of reality within SMEs in the ICT sector This study sought to enhance the understanding of the actions and attitudes of entrepreneurs The research combined hard tangible facts which are enhanced by the entrepreneur's commentary pieces Each entrepreneur presented 'real world' answers to the open-ended questions However, the answers were given solely through the perspective of each entrepreneur This can incur bias. For example, when the entrepreneurs were asked to rate the general management skills amongst all Irish SMEs, some of the results proved to be rather critical. When the entrepreneurs were asked to rate their own management skills, the results rarely went below average However, the open-ended questions proved useful in providing a causal explanation to the results Only individual respondents can provide an understanding, as to why they may or may not, under-take management training or have a future strategic plan Studies which attempt to understand the reason behind the facts are often faced with some degree of bias. The facts allow researchers to measure and hone in on specific issues. In this study, it is the reasoning behind the facts which may present a solution to the problems and enhance future research

#### 6.3 Significant Conclusions from the Study

The findings from the introductory section show a significant gender divide with only 1 female entrepreneur out of a total of 22. This is also relative to the overall amount of entrepreneurs surveyed which showed a total of 2 female owner-managers out of 80 potential responders. The majority of SMEs have been affected by the recession. The SMEs which were founded and had successfully expanded 'pre-recession' are not affected by the current economic downturn. The remaining SMEs which were also founded 'pre-recession' and failed to expand are most affected by the recession. Access to finance and the inability to 'expand' are the business areas most affected by the recession. However, the ability to generate new products/services and ICT functions are the least affected. This may be specific to the ICT sector.

The findings in the second section of the survey, 'Entrepreneurial Education' prove that all of the SME owners have gained a third level qualification. Despite operating in a hi-tech sector the majority of entrepreneurs state that the skills which they gained

through college are more business related. This shows that the ICT sector is predominately managed by business graduates and not ICT graduates. The overall findings show a positive co-relation between entrepreneurial education and the success of SMEs. The research proves that entrepreneurship can be taught and it is positively received/ supported by entrepreneurs. These findings suggest that it is 'nurture' not 'nature' that is the developmental factor in the creation of entrepreneurs.

The findings of the third section of the survey, 'SME Management and Development', suggest that entrepreneurs envision themselves as leaders and not managers. This is a significant discovery as entrepreneurs may disregard the necessity for management training and neglect various business needs. The overall managerial skills rated as average, which concludes that the entrepreneur's skill-sets remain under-developed. The SME owners state time and cost constraints as the main barriers to management. The entrepreneur's main source of management training came from third level education, for others 'experience' was their teacher. However, the time elapsed between this training is significant. The remaining 40% of SMEs had no management training. These findings suggest that the entrepreneurs have not considered further management training beyond what was taught in their third level qualification.

The main areas for development include HR and training, which supports the current literature, that these are typically neglected areas within SMEs. The findings also show 45% of entrepreneurs prove negligent in strategic future planning. This result and the additional comments, support current ideologies, that SMEs are too busy 'surviving' to develop future initiatives. The types of SMEs studied are micro (less than 10 employees) and small (between 10-29 employees). These SMEs are either attempting to expand or are currently expanding. The results show 'expansion' as an area most affected by the recession. Furthering this problem is the lack of strategic planning/HR initiatives and averagely rated management skills.

#### 6.4 Implications for Future Research

The findings of this study uncover a significant gender division amongst entrepreneurs in the ICT sector. Future research may explore why such a vast gender division exists and whether it is specific to the ICT sector or SMEs as a whole

The findings produce a pattern between the micro and macro SMEs which were founded prior to the recession. The micro enterprises which failed to expand are struggling more as a result of the recession. The small enterprises which expanded remain unaffected by the recession. Future research can be conducted to uncover the reasons behind this discovery. Further research into this area can address the effect, SME development may have on the firm's ability to survive and cope, in a turbulent environment.

Future research can consider Barrett and Meyers (2010) theory which states that if owners have a 'blueprint for HR at the time of the firms founding it can have long lasting effects' Future studies can investigate if SMEs containing HR strategic plans from the time at which they are founded are more successful than those without any HR strategic initiatives

The majority of SMEs surveyed in this research are at the premature start-up phase As a result, the analysis on the effects management skills have on the development of an SME remains inconclusive A longitudinal study is required to determine what effects the entrepreneur's management skills may have on the development of the SMEs

A solution based study can also be conducted to understand and develop a new initiative for the major time and cost constraints, which face entrepreneurs attempting to participate in managerial training courses. This appears to be an on-going problem with no solution based studies currently being conducted.

A cross sectional analysis can also be conducted to ascertain whether the findings of this survey are comparable to other sectors within the SME industry Finally, the revision of third level curriculums can be researched to ascertain the viability of students and entrepreneurs both benefitting from the interconnection of skills, education and practical work experience

# Appendices

# Appendix 1: Key Concepts and

### **Definitions**

#### **Entrepreneur**

Is understood as, 'the aggressive catalyst for change in the world of business' (Hill 2001, p 179)

Which is characterised by 'a composite skill, the resultant of a mix of many qualities and traits' (Jyothi 2009, p 39)

#### Small to Medium Enterprise (SME)

Are considered to be 'any entity engaged in an economic activity, irrespective of its legal form' (Enterprise Europe Network, 2010, p 2)

#### **SME Categorisations**

'Micro' firms less than 10 employees 'Small' enterprises have 10 to 29 employees The 'medium' sized firms contain between 50 and 249 employees (Enterprise Europe Network, 2010)

#### SME Growth

For the purpose of this study, 'growth' is understood to be an organisational outcome that reflects choices made by managers. Growth is enabled by four core factors, the external environment, the owner-manager, innovation and networks

#### Entrepreneurship Education

Is defined as 'the ability of an individual possessing a range of essential skills, attributes, to make a unique, innovative and creative contribution in the worlds of work whether in employment or self employment' (Northern Ireland Governments, 'Entrepreneurship and Education Action Plan', cited in Kozlinska 2011, p 207)

#### Entrepreneurial Learning

Is defined a 'learning to recognise and act on opportunities, through initiating, organising and managing ventures in social and behavioural ways' (Rae, 2006 p 40)

#### **Skills/Competencies**

Are understood as 'underlying characteristic [characteristics] of a person that results in effective and/or superior performance on a job' (Down, 1999)

#### **Future-focused Initiatives**

Is described as 'the strategic and structural choices made by entrepreneurs' (Hambrick and Crozier, cited by O' Gorman 2006, p. 3)

#### Training

Is an 'Organised activity aimed at imparting information and/or instructions to improve the recipient's performance or to help him or her attain a required level of knowledge or skill' (Business Directory, 2010)

#### Manager

Is a person who 'has the power and responsibility to make decisions to manage an enterprise management consists of the interlocking functions of formulating corporate policy and organizing, planning, controlling, and directing an organization's resources to achieve the policy's objectives' (Business Directory, 2010)

#### **Development**

'The systematic use of scientific and technical knowledge to meet specific objectives or requirements [and] the process of economic and social transformation that is based on complex cultural and environmental factors and their interactions' (Business Directory, 2010)

### **Appendix 2: SMEs Survey**

#### Small to Medium Enterprise (SME) Development Survey

To Whom it May Concern,

My name is Aisling Ryan I am a Masters Student with the National College of Ireland studying Human Resource Management I have been tasked with creating a dissertation. The intent of this project is to gain an insight into the effects an entrepreneur's education and management skills have on the development of an SME Input from each SME is important to ensure the research is directed at identifying key 'real world' issues

#### **Notes on Survey**

- 5 Please submit completed surveys by Friday the 27th of July
- 6 Please complete all questions and do not leave blanks Use n/a is a question is not applicable
- 7 Time to complete the survey is approximately 15 minutes
- 8 Please note there are no questions regarding the finances of your business
- 9 The majority of the answers are tick the box though some questions may require your own personal opinion which is welcomed

I understand that many business owners are constrained by time but I would be very grateful if you could take 10 minutes to fill out this survey Finding SMEs that have survived, thus far, the recession is difficult and so I value your input greatly

To submit the survey document back please follow any of these two steps

- First, save the data in the survey by clicking "File Save" Second, close the file and attach it mto an email to
- If you use an email client such as Thunderbird or Microsoft Outlook, you can click in the top right corner of the survey where it says "Submit form" and it will be automatically emailed to my email address

### Support/Queries

If you have any queries regarding the content of the survey please do not hesitate to contact me on Mobile Email

Thank you for your participation

#### **Survey of SMEs**

Section	n 1: SME Background Informa	tion				
Q1.1	Are you Male or Female?	F	)			
Q1.2	What year was your comp	any founded?				
Q1.3	How many people are emplo	oyed in your organ	isation?			
Q1.4 If yes,	Has the recession affected YES please rate the following factor	NO C			cession.	
		1-Not Affected	2-Slightly	3-Affected	4-Substantially	5-Most
Creation Sales	ting	00000	Affected O O O O O O O O O O O O O O O O O O O	0 0 0 0 0 0 0 0 0 0	Affected O O O O O O O O O O O O O O O O O O O	Affected O O O O O O O O O O O O O O O O O O O
Section	n 2: Entrepreneurial Education	n				
Q2.1	What is the highest level of or Primary school Junior certificate Leaving certificate Diploma Degree Masters P.H.D. Other	education have you	u obtained?			
Q2.2	List the three core skills of	btained from your	education.			
Q2.3	Are these skill sets more bus	iness or technolog	y related?			

Q2.5	In your opinion can entrepreneurship be taught? YES No
Q2.6	As an entrepreneur do you feel you would have benefitted from some form of Entrepreneurial Education?
	YES NO
Q2.7	Have/ Would you be willing to support entrepreneurial education initatives by offering your own knowledge and experience to budding entrepreneurs?  YES  NO  O
Section	n 3: SME Management
Q3.1	Which managerial style best describes you?  Coercive Authoritative Democratic Coaching Dictatorial
Q3.2	Choose five of the following personal charachteristics that best describe you.
	Innovative Organised Charismatic Efficient Planner Future Focused Good Time Management Good Communicator Delegate Workload Decisive Visionary Controlling
Q3.3	Generally, how would you rate the general management skills amongst Irish SMEs?  Poor Inadequate Average Good Excellent
	Comments

Q3 4	Rate your functional management skills in the following areas?
	1   Poor   2   Inadequate   3   Average   4   Good   5   Excellent
Q3 5	Rate the efficiency of your management skills under the following headings  1 Poor 2 Inadequate 3 Average 4 Good 5 Excellent  Organising Planning Quality Control Project management Delegation Crisis Management Managing Innovation Controlling Structuring the organisation Developing a company culture  1 Poor 2 Inadequate 3 Average 4 Good 5 Excellent  O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O O
Q3 6	Did you undertake any management training? YES NO
Q3 6 1	If yes when?
Q3 6 2	What form of training did that take?
Q3 6 3	If no what barriers to management training most applied to you?  Training is irrelevant  Constrained by Time  Constrained by Cost  Not locally available  Course topics don't apply to SME managers  Courses available are sub-standard
Q3 7	Which course provider would you prefer to learn from? State Agency Course Provider Third Level Institutes Private Run Courses

Q39	Do you avail of any strategic HI YES O Why/ Why not?	R training ini NO	tatives?		
Q3 10	Rate the following areas of your Sales I T Marketing HR Training R&D Finance New Products/Service Customer Service	Developed O O O O O O O O O O O O O O O O O O O	n terms of their cui 2 Inadquately Developed O O O	rrent developmental status  3 Averagely 4 Significantly Developed Developed O O O O O O O O O O O O O O O O O O O	
Q3 11	Chose one of the options below Start up Expanding Maturity Diversification/Stablility Stage	w that best o	describes the devel	opmental stage of your SM	1E
Q3 12	What stage in the developmen	ital process t	o you hope to read	ch in 5 years time?	

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