Chapter 3: The entrepreneurship process

3.1 Introduction

This chapter continues the literature review aimed at completing the exploratory study that forms the basis of the final model prepared for empirical testing. The first section of this chapter defines the entrepreneurship process and discusses why acquiring skills is a key requirement of the entrepreneurial process. The chapter then proceeds to investigate the importance of the skills identified in chapter 2 in terms of their importance in each of the four main stages of the entrepreneurship process. This review further highlights other key skills that are likely to influence (positively or negatively) each stage of the entrepreneurship process. Thus this chapter presents the final model of skills that SMEs must acquire to succeed in each of the 4 stages of the entrepreneurship process.

3.2 The entrepreneurship process

Following the discussion in Chapter 1, entrepreneurship is described as the pursuit of market opportunities to create future innovative goods and services discovered, evaluated and exploited to extract social and economic value from the environment, leading ultimately to new independent business / venture creation (Shane & Venkataraman, 2000:218; Kirzner, 1973; Fox, 2004:1; Dess et al, 1999:94). The highly complex process of new venture creation is embodied in entrepreneurship (Hisrich et al, 2005:39; Baron, 2004a:169).

At start-up, the entrepreneurship process is a course of action that involves all functions, activities and actions associated with identifying and evaluating perceived opportunities and the bringing together of resources necessary for the successful formation of a new firm to pursue and seize the said opportunities (Bygrave, 1997:2; Cornwall & Naughton, 2003:62). Once set up, the process of entrepreneurship becomes effectively a cyclical progression of opportunity targeting and making strategic decisions regarding the allocation of scarce resources in pursuit of value adding opportunities (Glancey, 1998:18; Kodithuwakhu & Rosa, 2002:443).

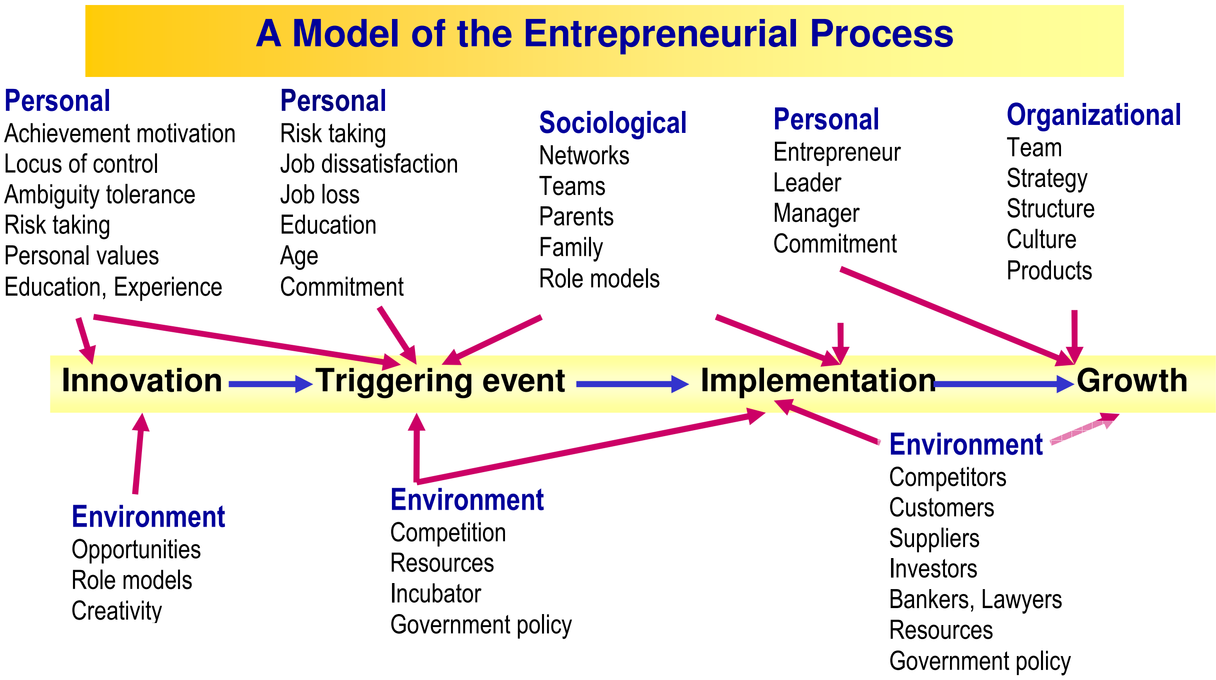
Although theoretical models of the new venture creation process differ in the assumptions and variables encompassed, they do include common elements (Mueller &

Thomas, 2001:53). Different authors have identified between two and five distinct stages in the entrepreneurship process as briefly discussed below:

Pretorius et al (2005a:57) say that the literature cites two broad dimensions of the entrepreneurial process, namely opportunity recognition and resource acquisition. Gruber (2002:193) identifies three distinct stages, namely the pre-founding stage (opportunity identification and evaluation); a founding stage (business plan, resource gathering, incorporation and market entry); and an early development stage (building the company and market penetration). Baron (2004a:170) names the three stages of the entrepreneurship process as screening ideas for feasibility; assembling needed resources; and actually developing a new business.

Bhave (1995:223) identifies four stages namely opportunity identification, technology set up, organization creation and the exchange stages. This is supported by Hisrich & Peters (2002:40) who articulate four stages of the entrepreneurial process namely identifying and evaluating the opportunity; developing the business plan; determining the resources required; and managing the resulting enterprise as illustrated in Figure 3.1 below:

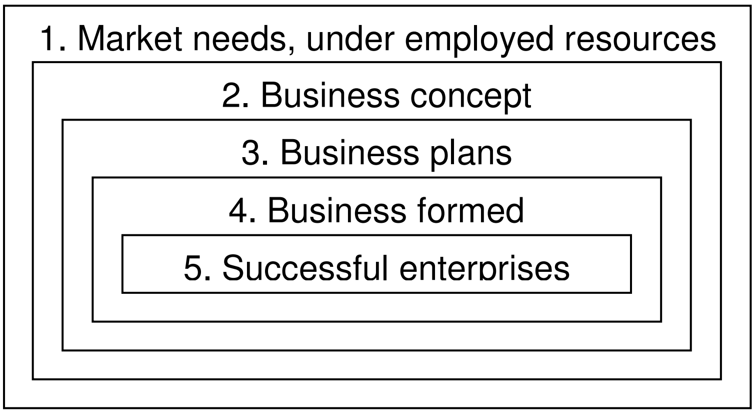
Figure 3.1: Entrepreneurial process model by Hisrich & Peters



Source: Hisrich & Peters (2002:48)

Rwigema & Venter (2004:28) identify five specific steps, namely identifying, measuring and refining an opportunity from multiple ideas; formulating a business plan; marshalling the resources; organizing and mobilizing a team; and overseeing the new venture creation and growth. Figure 3.2 below illustrates Ardichvili et al (2003:107) five-step path from market needs to a successful enterprise.

Figure 3.2: The entrepreneurial process by Ardichvili et al



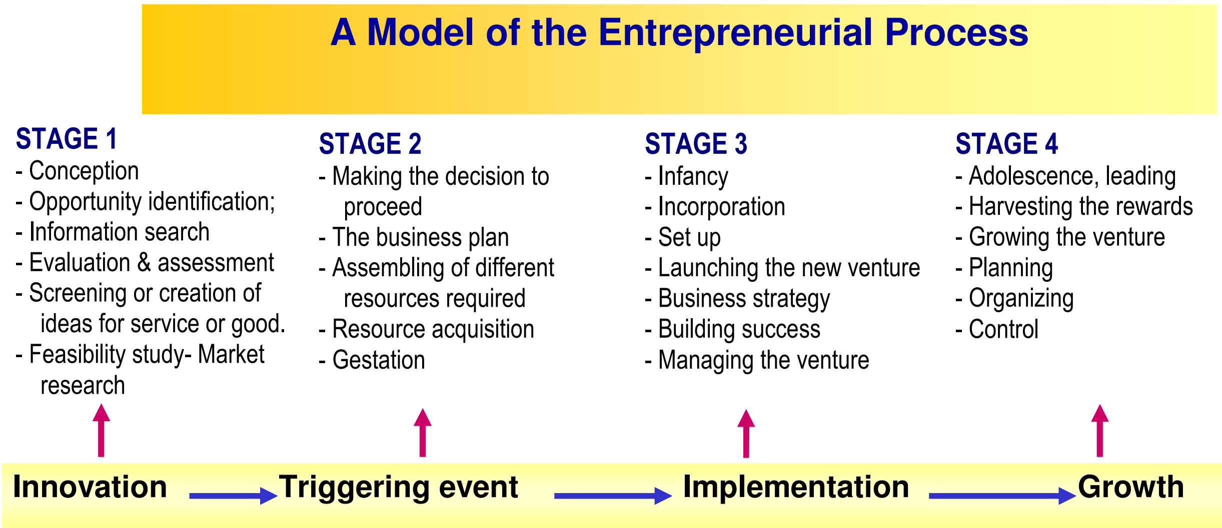
Source: Ardichvili et al (2003:107)

This study integrates of all the activities in the entrepreneurial process as articulated by the authors reviewed above (Ardichvili et al, 2003:107; Pretorius et al, 2005a:57; Hirsrich & Peters, 2002:48; Gruber, 2002:193; Baron's, 2004a:170). Thus the four stages of the entrepreneurial process are defined as follows:

1. **Innovation,** which includes generating the idea, innovation, identifying a market opportunity, information search, conception, screening ideas for feasibility, identifying where to extract value and the development of the product or service.
2. **Triggering event,** which includes gestation, the motivation to start a business, the decision to proceed, the business planning, identifying the different resources required, risk assessment, resource acquisition and assembling.
3. **Implementation,** which includes infancy, incorporation, setting up and launching the new venture, business strategy, implementing the business plan, running the business, deploying of resources, building success and managing the venture.
4. **Growth** which includes adolescence, maximizing profits, harvesting the rewards and continually growing the venture to include other opportunities.

The adapted entrepreneurial model is illustrated in figure 3.3 below.

Figure 3.3: The adapted entrepreneurial process model



Source: Own adaptation

While the entrepreneurship process stages are discontinuous and linear, in practice these five stages overlap, interact and depend on each other (Bygrave, 1993:278; Hisrich & Peters, 2002:39; Ardichvili et al, 2003:107; Baard & Van den berg, 2004:7).

Different skills are needed for the different stages of the process (Pretorius, 2001:37); as factors of success and problems vary according to each of the different stages of the entrepreneurial process (McMahon, 2001:10). Studying the skills needed per entrepreneurial process stage will highlight the interactive nature of the key skills influencing each stage (Carter et al, 1996:151; Kickul & Gundry, 2002:85).

3.3 Skills required in the entrepreneurship process

This section examines the four stages of the entrepreneurial process in terms of understanding each stage and identifying the skills needed for success in that stage of the entrepreneurship process. The discussion will be guided by the key and supportive skills in the three business areas namely “Product differentiation” (Technical skills), “Functional competencies” (Business Skills) and “Enterprising competencies” (Personal Skills and Entrepreneurial Skills) as identified in Chapter 2.

3.3.1 Entrepreneurial Process - Stage 1

Most authors agree that the initial stage in the entrepreneurial process is the identification and refining of a viable economic opportunity that exists in the market (Kuratko, 2001:171; Baron 2004b:221; Timmons, 1999:250; Bhave, 1994:224). Without the recognition of an opportunity the entrepreneurial process is likely to result in failure (Kodithuwakhu & Rosa, 2002:434; McCline et al, 2000:83).

Opportunity recognition corresponds to the principal activities that take place before a business is formed or structured (Fletcher, 2006:423; Hill & Stewart, 2000:106). The opportunity identification stage can be divided into five main steps namely getting the idea/scanning the environment, identifying the opportunity, developing the opportunity, evaluating the opportunity and evaluating the team (Gartner et al, 1999:220; Ardichvili et al, 2003:108).

- **Getting the idea**

Robertson et al (2003:313) argue that there is a strong link between getting the initial idea and the starting of the new enterprise. Rwigema & Venter (2004:159) define an idea as simply the conception of a possibility and a reflective method of evading, circumventing or surmounting obstacles and challenges. The *Oxford Dictionary* defines an idea as 1. A thought or suggestion about a possible course of action. Synonymous with "idea" are the terms thought, intention, scheme, suggestion, proposal, initiative, spur, impulse, brainwave, insight, concept and connotation (*Oxford*, 2005).

Since ideas are many, developing the idea into a market opportunity, implementing it and building a successful business around it are the important aspects of entrepreneurship (Bygrave, 1997:6; Lumsdaine & Lumsdaine, 1995:167).

A market opportunity is a gap left in a market by those who currently serve it, giving a chance to others to add unrealized value by performing differently from and better than competitors in order to create new possibilities (Wickham, 2001:38). The *Oxford Dictionary* (2005) defines opportunity as a favourable time or set of circumstances for doing something. Synonymous with opportunity are chance, opening and prospect.

Timmons (1999:38) cautions that while business opportunities are detected from ideas, an idea is not synonymous with opportunity. The difference between an idea and an opportunity is that an opportunity is the possibility of occupying the market with a specific innovative product that will satisfy a real need and for which customers are willing to pay (GEM, 2003a:12). McCline et al (2000:83) conclude that successful venturing may well rest upon the ability to recognize or distinguish an opportunity from an idea.

- **Opportunity identification**

Kirzner (1973) advocated a theory of entrepreneurial alertness, describing it as the entrepreneur's ability to see, to discover and exploit opportunities that others miss. Hisrich & Peters (2002:40) noted that this is a very difficult task, as most opportunities do not just appear but rather result from an entrepreneur's alertness to possibilities.

Markman & Baron (2003:289) lists steps involved in opportunity identification to include scanning the informational environment, being able to capture, recognize and make effective use of abstract, implicit and changing information from the changing external environments. Man et al (2002:127) adds that opportunity identification is basically seeking out better ways of competing.

- **Opportunity development**

Morris & Zahra (2000:92) argue that having recognized the opportunity, timely adaptation of that opportunity to suit actual market need is key to new venture success. Kodithuwakhu & Rosa (2002:434) defines opportunity development as the process of combining resources to pursue a market opportunity identified. Markman & Baron (2003:289) conveys that this involves systematic research to refine the idea to the most promising high potential opportunity that can be transformed into marketable items.

- **Opportunity evaluation**

Ucbasaran et al (2004:434) declare that a critical element of the entrepreneurial process is the opportunity screening and evaluation. Hisrich et al (2005:117) affirm that a professional executed evaluation can tell whether the specific product or service has the returns needed to justify the investment and the risk to be taken. According to several authors (Timmons, 1999:109; Rwigema & Venter, 2004:171; Gartner et al, 1999:223;

Carter et al, 1996:157) evaluating the opportunity must answer the questions listed in table 3.2 below.

Table 3.1: Business factors and questions for opportunity evaluation

Business factor	Questions for evaluation
Product or service	• Description of the product or service, its differentiator, purpose and the need it fills • What competitive advantage / benefits does the product have? • What is the required customer care support for this product/service? • Is the company able to produce product and supply required aftercare support?
Market opportunity	• Where is the market demand? What is the target market? Is it generic or a niche? • Industry characteristics (growth rates, change, entry barriers). • What market share can the product reasonably expect today? In 2, 5 or 10 years? • Timing and length of the window of opportunity? • What competition exists in this market? Substitutes? How big is their turnover? • How accessible are the desired distribution channels?
Costing and pricing	• How much will it cost to develop the product and commercialize it? • Where will the funds come from? • How do the pricing, costs and economies of scale compare with competitors? • How easy is it to acquire equipment, skills and other inputs required?
Profitability	• Where is the money to be made in this activity? What are the gross margins? • Would the return on investment be acceptable? What is the payback period? • What are the cash flow patterns and the source of working capital?
Capital requirements	• How much capital (people, operating expense and assets) is required to start? • What are the long-term capital needs? • How much of the required capital is secured and where will the rest come from? • What securities are available to guarantee the required funds? • Is there a list of potential funders? In case the funders withdraw their capital?
Issues and risks	• What risks (real and perceived) are inherent with the product/service? • Industry based risks e.g. is the market on a decline? • Are there plans for surviving the death of the lead entrepreneur? • Unreliable forecasts? Inadequate cash flow? • Inability to grow with the demand or cope with shrinking sales? • Supplier and value chain management?

- **Assessment of the entrepreneurial team**

Regardless of how right the opportunity may seem to be, it will not make a successful business unless it is developed by a team with strong skills (Bygrave, 1997:16). Gartner et al (1999:230) advices that once the opportunity has been evaluated, the next step is to ask pertinent questions about the people who would run the company. Such questions are illustrated in table 3.2 below:

Table 3.2: Team factors and questions for opportunity evaluation

Business factor	Questions for evaluation
Focus:	• Is the founder really an entrepreneur, bent on building a company? • Does the entrepreneur (or his team) have some experience (work or industry)? • Do they really like this product/sector? Do they really want this? • Can the team create products to suit that market need? • How stressful is the opportunity for the team?
Selling:	• Does the team have the necessary selling and closing skills?
Management:	• Who will work full time? Do your managers represent competitive advantage? • Does the team have the necessary management and technical skills? • If the required skills are not available, can they be acquired at competitive rates? • How is their relationship with the entrepreneur, commitment and motivation?
Ownership:	• Have the critical decisions about ownership and equity splits been resolved? • Are the members committed to these? • Does the owners have enough financial capital for required own contributions?

Skills required for success in stage 1

From the 100 authors reviewed these skills below were identified as critical for this stage:

- **T/S = Technical skills**

Davila et al (2003:690) suggest that technical skills are a prerequisite as they provide entrepreneurs with the ability to identify opportunities based on existing competence.

- **PC = Communication**

Guzman & Santos (2001:216) identify the ability to interact with individuals from many different backgrounds, plus interpersonal skills such as listening and persuasive communication as linked with success in the opportunity identification stage.

- **PP = Problem solving**

Baron (2004b:221) argues that the abilities that are required for successful identification of a business opportunity include the capacity to solve everyday problems.

- **PM = Motivation (need for achievement)**

Rwigema & Venter (2004:112) name personal motivation as one of the key success factors for systematically scanning and spotting the market opportunity.

- **PA = Adaptability to change**

GEM (2003a:11) state that entrepreneurs who have adaptability to change have a higher probability of identifying opportunities.

- **PT = Time management skills**

Morris & Zahra (2000:92) identify timing as crucial for identifying market opportunities.

- **BF = Financial management**

Erikson (2002:280) expresses that opportunity identification is dependant on skills that enable the nascent entrepreneur to accurately forecast financial estimates.

- **BH = Human resources**

Robertson et al (2003:311) says that the entrepreneur must be able to evaluate the opportunity and how it fits with the skills of the team.

- **BM = Marketing**

Gartner et al (1999:230) declare that successful entrepreneurs have the abilities to identify niche markets, to identify the paying customers and to analyze competitors.

- **BN = Networking**

Drakopoulou (2002:117) asserts that networking can facilitate successful opportunity identification as networks are pathways through which the firm can access opportunities.

- **BP = Planning**

Lussier & Pfeiffer (2005:233) agree with Man et al (2002:127) perception that most successful entrepreneurs have skills that allow them to formulate strategic plans for setting up the business.

- **BR = Research and development**

Hill & Stewart (2000:115) emphasizes that opportunity adaptability is linked to the firm's intelligence-gathering efforts, which include gathering, disseminating, sharing and acting on intelligence.

- **BI = ICT skills**

The OECD (2002a:16) notes that ICT skills allow the entrepreneur to access critical knowledge about markets, opportunities and businesses.

- **EC = Creativity**

Friedrich et al (2003:2) and Pretorius et al (2005a:56) support Schumpeter (1934) and Kirzner (1973) who deem creativity to be key for seeking business opportunities.

- **EI = Innovation**

Wickham (2001:38) supports Freel & Robson (2004:561) by recognizing that innovation is considered key to the identification of opportunities.

- **EO = Opportunity recognition**

Ardichvili et al (2003:107) suggests that the ability to detect, identify, select, evaluate and develop the right business opportunities is key for success in this first stage. This is supported by Baron (2004a:170) who argue that successful entrepreneurs perceive opportunities hidden to others.

- **EG = Ability to gather and control resources**

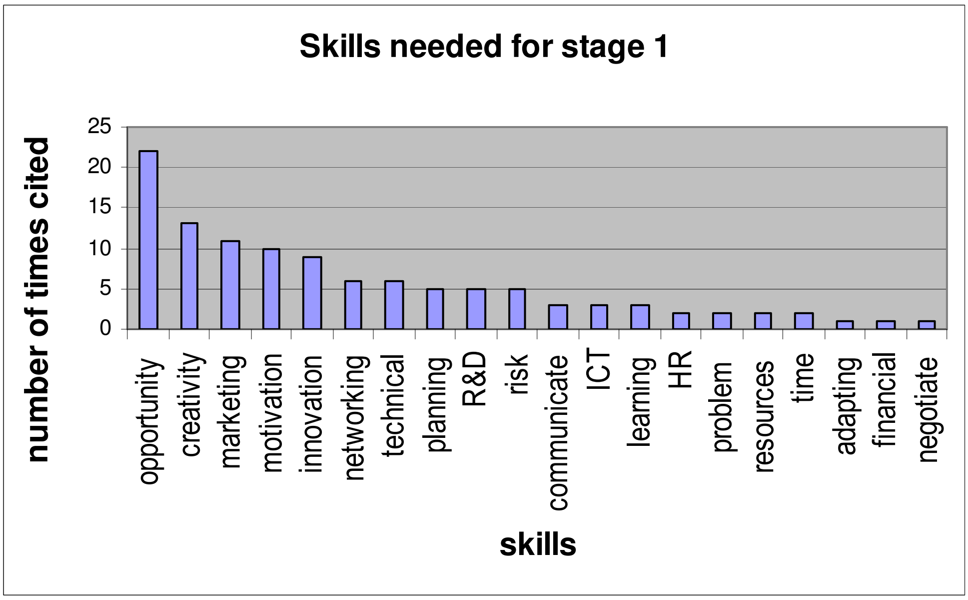
Bradley (2002:15) lists the ability to identify resources needed to pursue the identified opportunity and to conceptualize how the entrepreneur will secure these resources as important.

- **ER = Calculated risk taking**

Baron (2004b:224) puts risk taking as a factor that influences the process of opportunity recognition and development. Rwigema & Venter (2004:175) agree t\with him that identifying, quantifying plus analysing potential uncertainties and envisioned risks linked with each opportunity identified is important for this stage.

Figure 3.4 below illustrates the number of times a skills category was cited by the 100 authors reviewed:

Figure 3.4: Skills required for stage 1 of the entrepreneurship process



More than 10% of the 100 authors reviewed citing opportunity identification, creativity, marketing and motivation skills as important for stage 1 of the entrepreneurship process. This implies that the integrated model equation 2.21 **↑E/P = F(key skills) x (1 + H(supporting skills))**, can be adapted such that the equation describing the key skills for this stage 1 will read as equation 3.1 below:

F(Key skills in stage 1) = [a.PM x m.EO x q.EC x t.BM) (3.1)

3.3.2 Entrepreneurial Process - Stage 2

Bygrave (1997:17) and Carter et al (1996:152) argues that the triggering/initialization stage can be divided into four main steps, namely the decision to become an entrepreneur, the developing the business plan, the assembling resources to create the organization, the developing of an organizational boundary and the exchanging of resources across that boundary.

- **Motivation to become an entrepreneur**

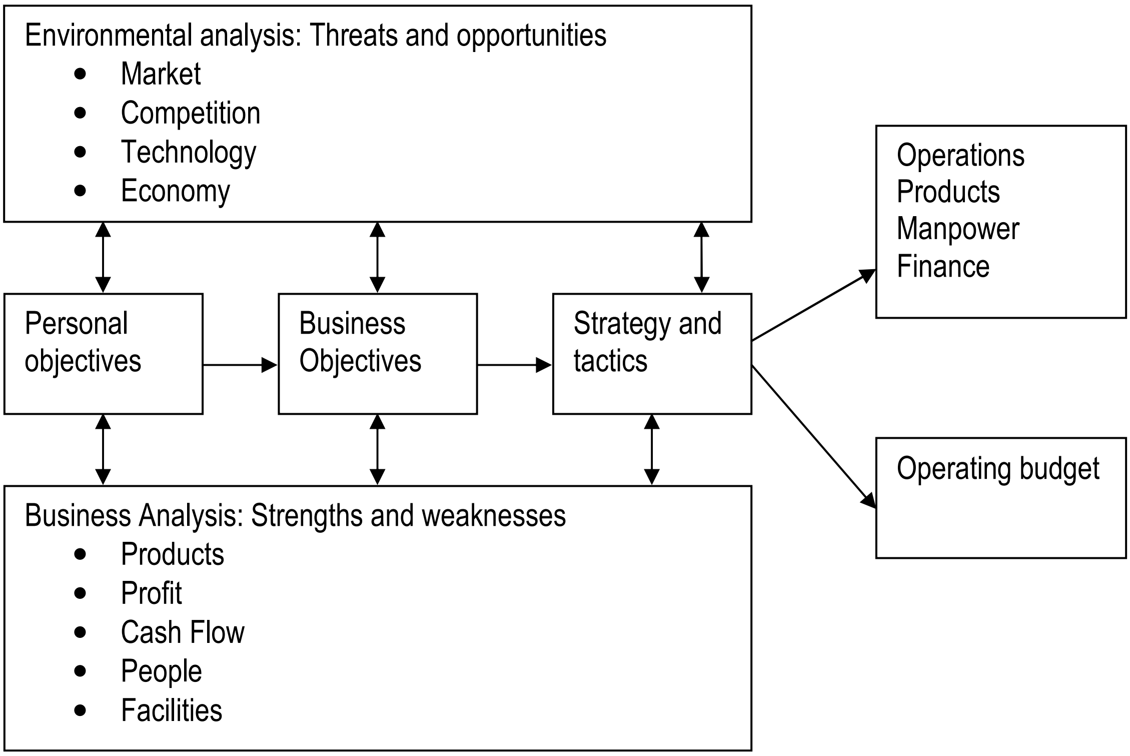
Baron (2004b:221) suggests that the initial and crucial step in this entrepreneurial process stage is the decision to become an entrepreneur. Many authors including Wickham (2001:35), Hisrich & Peters (2002:79), Nieman et al (2003:31) and Baum, Locke & Smith (2001:93) pronounce that the actual decision to become an entrepreneur is motivated by different factors that can be categorized into either the push (necessity) or pull (opportunity) factors. Watson et al (1998:224) endorses this and warns that motivation may also have a bearing on their ultimate success or failure in business.

- **Planning**

Wickham (2001:192) states that once the entrepreneur has formulated a strategy, it is time to formalize a business plan. Hisrich et al (2005:42) agree with Nieman (2006:20) that a good business plan is essential to exploiting the defined opportunity and determining the resources required, obtaining those resources and successfully managing the resulting venture.

Dollinger (1999:134) articulates that proper planning is important for the development iof a good business plan. Figure 3.5 below demonstrates the process of planning as illustrated by Baard & van den Berg (2004:3):

Figure 3.5: The planning process for a business



Source: Baard & van den Berg (2004:3)

- **Gathering resources**

Hellman (2007:81) declares that once the entrepreneur has carefully assessed all the required resources and strategies into a business plan, the next thing is to gather the resources needed for addressing the opportunity. Gartner et al (1999:216) considers the acquiring of resources to be as important as opportunities discovered, because in the absence of the key resources the entrepreneurial process is likely to result in failure. Hisrich & Peters (2002:42) pronounce that it is the entrepreneurs' responsibility to attract resources that are sufficiently strategic, valuable or rare.

Company resources can be divided into six key ingredients:

- Technical know-how, which assists in the production of a quality product or offering of a service (Rwigema & Venter, 2004:180).
- Finance including equity, cash and borrowing power (Ayotte, 2007:161).
- Physical assets including buildings, equipment, machinery and vehicles (McMahon, 2001:10; Vesper 1982:327).
- Human resources including motivated employees with skills, training, experience, emotional and intellectual abilities (Kodithuwakhu & Rosa, 2002:435).

- Intangible resources including information, networks, protected patents, unique technology and brand reputation (Morris & Zahra, 2000:93).

Skills required for success in stage 2

To complete this triggering/initializing stage successfully the entrepreneur and his/her team need to have skills that will enable them to do most of the activities outlined above. From the 100 authors reviewed the following skills were identified as key for this stage:

- **Technical skills (T/S)**

Perks & Struwig (2005:178) assert that technical skills are a precondition for successfully starting a business. This is supported by Tustin (2001:83) who states that inadequate technical proficiency are the most prominent reasons for start-up failure.

- **PP = Problem solving**

Davila et al (2003:700) note that problem-solving abilities allows entrepreneurs to overcome challenges rife in the start-up stage and therefore are key to successfully starting a small business.

- **PN = Numeracy and literacy**

Tustin (2003:26) puts forward that to set up an SME, it is critical that SMEs owners must be able to read and write. Addis (2003:152) warns that low levels of literacy threaten economic performance.

- **PC = Communication skills**

Addis (2003:153) counsels that having spotted an opportunity, the SME owner needs basic good communication skills to convince funders and employees to be part of the venture.

- **PM = Motivation (need for achievement)**

Nasser et al (2003:396) affirm McClelland (1987:221) and Timmons (1999:38) who deem that motivation (and the related ‘need for achievement’, self confidence and self efficacy) is considered key factors during SME startup as it determines the entrepreneurial intention and the chances that those intentions will be converted into action. Robertson et al (2003:313) agrees and cautions that a business will neither start up nor succeed without motivation.

- **PA = Adaptability to change**

Mazzarol et al (1999:49) posit that the key to success in setting up of new ventures is in continuous adaptation and tolerance of ambiguity. Within the context of start-up, adaptation refers to the founders' willingness and ability to make appropriate adjustments to the business concept as the venture evolves from an initial business idea, to the business plan and finally to an operational enterprise (Morris & Zahra, 2000:94).

- **PL = Learning abilities**

Man et al (2002:127) say that the ability to adapt is a function of the individual entrepreneur and his/her ability to learn.

- **PD = Decision-making skills**

Baron (2004b:221) states that the key to successfully starting a new venture lies in the ability to make fast but accurate decisions.

- **PG = Negotiating skill**

Rwigema & Venter (2004:33) reason that negotiation and persuasion skills are key skills necessary to start a business.

- **BF = Financial management**

Strydom & Tustin (2003:11) conclude that entrepreneurs who successfully start-up new ventures have adequate financial management skills that enable them to accurately estimate their resource needs, to understand the financial terminology that investors and venture capitalist use and to indicate that the proposed venture can make on average 5% profit to be able to re-compensate their investors and cover the staff's salary.

- **BH = Human resources**

Carter et al (1996:156) surmise that to successfully start a small business, the entrepreneur must be able to organize a team, to retain suitable staff, to match employee with operational needs and facilitate the adoption of an organizational vision, strategy and goal. This is supported by Clover & Darroch (2005:243) and MacMahon & Murphy, (1999:27) who warns that lack of human resource management skills is cited as a key factor constraining business start-up.

- **BL = Legal**

Gartner et al (1999:219) articulate that successful entrepreneurs seek advice from lawyers and normally form legal entities. Ahwireng-Obeng & Piaray (1999:78) agrees inferring that most potential entrepreneurs are either naive or uninterested in laws, taxation and regulations, and this normally affects their SME start-up negatively.

- **BM = Marketing**

Rwigema & Venter (2004:252) warns that poorly defined markets and insufficient market environment analysis can result in limited planning for start-up.

- **BN = Networking**

Many authors including Jack & Robson (2002:1) and Senjem & Reed (2002:1) have indicated that entrepreneurial networks are important for the mobilization and acquisition of scarce resources that are crucial to starting and developing a business. Drakopoulou (2002:117) asserts that networks can provide human contact, preventing the loneliness that comes with working alone.

- **BP = Planning**

Pretorius & Shaw (2004:224) state that most successful ventures have business plans. A realistic goal oriented business plan is perceived as the most essential document to be prepared by the entrepreneur when setting up a business, as it describes the fits and gaps between resources, opportunity and the entrepreneur; it maps the way forward for the business development and it is used to present a business case to financiers for application for finance (Hisrich & Peters, 2002:227; Mughan et al, 2004:428).

- **EM = Role model interpretation**

Friedrich et al (2003:2) agree Honig (1998:37) that exposure to relevant role models makes the act of initializing the entrepreneurship process seems much more doable.

- **EG = Ability to gather and control resources**

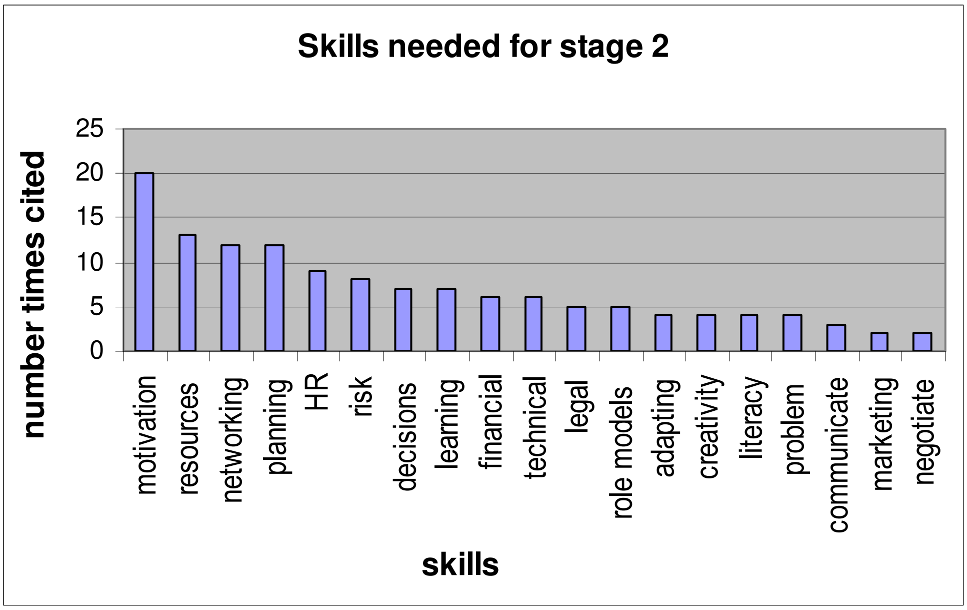
Ligthelm & Cant (2002:9) identifies efficient abilities to identify, seek, secure, capitalize on and control critical yet scarce resources as key to the success of the venture start-up phase. The inability to secure resources has cited as one of the main reasons leading to failure in entrepreneurial start-ups (McMahon, 2001:17).

- **ER = Calculated risk taking**

Markman & Baron (2003:290) observes that entrepreneurs pursue business without fully knowing how the market will react and whether their new products or services will succeed. Successful entrepreneurs have the ability to take calculated risks and to avoid the cognitive bias of underestimating the amount of risk involved in starting a new venture (Baron, 2004a:172).

Figure 3.6 below illustrates the number of times a skills category was cited by the 100 authors reviewed:

Figure 3.6: Skills required for stage 2 of the entrepreneurship process



More than 10% of the 100 authors reviewed citing motivation, securing resources, networking and planning skills as important for stage 2 of the entrepreneurship process. This implies that the integrated model equation 2.21 **↑E/P = F(key skills) x (1 + H(supporting skills)),** can be adapted such that the equation describing the key skills for this stage 2 will read as equation 3.2 below:

$$\textbf{F(Key skills in stage 2)} = [a.M \times q.EG \times z.BN \times \beta.BP) \qquad (3.2)$$

3.3.3 Entrepreneurial Process - Stage 3

Hisrich et al (2005:2) argues that after the resources are acquired the entrepreneur must use them to implement the business plan. Implementing literally means executing the vision and putting it into action (Oxford, 2005). Rauch & Frese (2000:3) define "action" as consisting of goal development, goal redefinition, detailed planning, execution with quality action, monitoring the plan, processing feedback and developing visions for future.

The activities undertaken in this stage include creating the organizational capabilities; implementing a management style in order to grow managerial competencies; setting up production processes, structures and systems; quality control; waste elimination and cost effectiveness; dealing with distributors and suppliers; selling to customers; collecting the finance; resolving operational problems; fending off competitors; steering the organization towards its goals and determining the key variables for success (Gartner et al, 1999:215; Hisrich et al, 2005; Man et al, 2002:127; Rwigema & Venter, 2004:40).

The tasks undertaken in this "implementation" step of the entrepreneurship process can be categorized into the four principles of management, namely planning, organizing, leading and control (Nieman, 2006:19).

Skills required for success in stage 3

It is one thing to be aware that entrepreneurial opportunities exist but a significantly different matter to have the skills to exploit these opportunities and manage the resulting venture (McCline et al, 2000:88; Hisrich et al, 2005:2). From the 100 authors reviewed the following skills were identified as needed for this stage:

- **Technical skills (T/S)**

Nieuwenhuizen & Kroon (2003:132) agree with Nieman (2001:446) and Rogerson (2001a:136) that technical business knowledge is a key firm factor affecting successful business performance. Cornwal & Naughton (2003:67) concurs with Czinkota & Ronkainen (2003:50) that no entrepreneur whose technical competence is in question can be successful because the entrepreneur must be able to create an excellent product.

- **PP = Problem solving**

Nieuwenhuizen & Kroon (2002:159) conjecture that successful entrepreneurs have the ability and perseverance to solve numerous problems, obstacles, challenging circumstances and difficulties in everyday management of the business.

- **PD = Decision making skills**

Baard & van den Berg (2004:4) agree with Man et al (2002:127) that successful entrepreneurs have the ability to swiftly make important decisions required to implement their dreams, to allow the firm to accomplish its goals, to maintain the business as a going concern and to manage risk.

- **PM = Motivation (need for achievement)**

Many authors have stated that entrepreneurial success is a function of achievement motivation and related self efficacy, positive attitudes and commitment (Baron, 2003:254; Nieman, 2001:446; Darroch & Clover, 2005:325; Pretorius et al, 2005a:57).

- **PT = Time management**

Orser, Hogarth-Scott & Riding (2000:47) argue that managing scarce time is crucial for business performance a scarce resource for the SME. The inability to adhere to time constraints has been cited as a factor contributing to failure (Ligthelm & Cant, 2002:41).

- **PG = Negotiating skills**

Hankinson (2000:94) found that persuasion and negotiation skills were important for business performance.

- **PC = Communication skills**

Nieman & Bennet (2006:99) conclude that active listening, clear information and comprehensible communication are very important for optimal business performance.

- **PA = Adaptability to change**

The rate of change in business gets ever faster and technological innovation progresses at a relentless pace (Gadenne, 1998:37). MacMahon & Murphy (1999:27) agrees with Watson et al (1998:230) that this implies that entrepreneurial success is a function of the capacity to being quick and nimble; being fast and flexible; keeping an open mind plus responding to and managing change.

- **PL = Learning abilities**

Kodithuwakhu & Rosa (2002:443) agree with Nieman (2001:446) successful entrepreneurs are capable and efficient managers who take advice from experts and learn quickly from mistakes and from experiences.

- **BB = Business systems management**

Mughan et al (2004:424) identify business processes and systems management skills as one the key enablers of business excellence. Sackett et al (2003:299) argue that all SMEs need to have a clear understanding of how their own business works and to have the ability to rapidly assess and define the business processes of their partnering organizations and competitors. GEM (2003a:12) and McMahon (2001:17) supports this and cites record keeping skills in particular as one of the business skills necessary to run a small business.

- **BG = General management**

Dockel & Ligthelm (2005:61) identify general management skills are one of the key factors in the entrepreneurial performance formulae. SME failure is often due to a lack of general managerial experience (Viviers et al 2001:11; Clover & Darroch, 2005:244; Nieman, 2001:446).

- **BF = Financial management**

As an SME progresses through various lifecycle stages, the financial dimensions of its operations tend to become more problematic (Nieuwenhuizen & Kroon, 2003:137; Perks & Struwig, 2005:179). Mughan et al (2004:424) concur with Delmar et al (2001:18) that financial management is one of the key business skills necessary to run an SME. Financial management issues that have been cited as skill-based factors negatively influencing performance and success of SMEs included the following:

- Inappropriate pricing strategy (Ligthelm & Cant, 2002:9).
- Inadequate bookkeeping knowledge and systems (Fielden et al, 2000:300).

- Lack of proper accounting (Gartner et al, 1998:225).
- Lack of adequate financial controls and monitoring (Viviers et al, 2001:6; Strydom & Tustin, 2003:2).
- Inadequate credit and debtors policies and controls (GEM, 2003a:12; Nieuwenhuizen & Kroon, 2003:129).
- Poor working capital management (Ladzani & van Vuuren, 2002:158).
- Poor Inventory control (Lean & Tucker, 2000).
- Lack of supplier credit (Perks & Struwig, 2005:179).
- Cash flow problems (Bygrave, 1997:23).
- Failure to reach income targets (Mughan et al, 2004:429).
- Large operation expenses (Strydom & Tustin, 2003:4).
- Excessive fixed costs (Viviers at al 2001:5; Tustin, 2001:17).
- Insufficient profits (Watson et al, 1998:230).
- Owner manager withdrawing too much cash (Deakins & Freel, 1998:148; Kodithuwakhu & Rosa, 2002:460).

- **BH = Human resources management skills**

Nieman (2001:446) emphasizes that those skills that help dealing with employee relations is one of the key skills required for successfully running a new business. Indeed, growing evidence suggests that the inability to successfully manage human resource issues is an important factor in the ventures ultimate failure (Baron, 2003:253).

Human resource management aspects that were cited as factors negatively influencing performance and success of SMEs included the following:

- Non-availability of suitably skilled personnel with specific management skills (Nieman 2006:20).
- Failure to recruit relevant, trained or experienced workforce (McMahon, 2001:17; Kodithuwakhu & Rosa, 2002:462).
- Inadequate labour capacity, as staff get by with general knowledge until assigned new specific roles and functions (Thornhill & Amit, 2003:498; Tustin 2001:5).
- Inability to motivate and retain a competent workforce (Luiz, 2002:67; Hankinson, 2000:94; Mazzarol, 2003:27).
- Poor training of workers and lack of skills development plans to ensure that the team acquires entrepreneurial competencies (Fielden et al, 2000:302; Way 2002:766).

- Inadequate management structure, leading to the inability to make effective decisions, lead or delegate authority (Yusof & Aspinwall 2000:283; Hudson, Smart & Bourne 2001:1105).
- Inability to deal with conflict, worry and stress (Thornhill & Amit, 2003:498; Glancey et al,1998:265).
- Inability to create attractive working conditions, leading to low staff morale and reduced personal loyalty to the SME (Bygrave, 1997:26).
- Inability to clarify job, roles, performance review and compensation processes (Ligthelm & Cant, 2002:7; Viviers et al 2001:20).

- **BI = ICT skills**

While ICT may not seem like a central concern to entrepreneurs that need a good business plan and seed funding more than they need a computer (McMahon 2001:17), today's information society requires that most SME have some level of ICT use integrated into their businesses (Romijn, 2001:57).

Marri et al (2003:152) agrees with the OECD (2002b:13) report that ICT is being used predominantly as a means to increase managerial competence towards efficiency and business performance. Chapman et al (2000:354) and Nasser et al (2003:397) conveys that the use of ICT can result in higher profit ratios due to improved access to information, enhanced networking, increased access to markets and crucial linkages with local businesses, as well as the reduction of client bad debts.

- **BM = Marketing**

Hankinson (2000:94) argues that marketing is one of the key skills needed by SMEs. Many entrepreneurs are "technically very proficient," but lack the sales and marketing know-how necessary to sell their product (Bradley, 2002:15; Freeman, 2000:374).

- **BN = Networking**

Jack & Robson (2002:1) assert that networking issues have been cited as factors influencing SME success. Networking assists business venture performance through peer advice, access to complementary skills, information sharing and discussing solutions to common problems encountered during the running of SMEs (Ladzani & van Vuuren, 2002:160).

- **BO = Operational**

Gruber (2002:197) argues that one of the bigger challenge for the SME founder is having to deal with the usual day-to-day business operations and at the same time build a viable organization. The operational skills necessary for successful running of SMEs include mastering production skills, quality assurance, acceptable productivity and related performance monitoring, as well as capacity management to enhance the use of existing capacity (Czinkota & Ronkainen, 2003:50; YTKO, 2003).

- **BP = Planning**

Miller et al (2003:223) indicate that planning (goal setting, systematic planning, greater planning sophistication, focused strategies and action plans) has a strong positive effect on the financial performance and has been positively related to business success. Lack of planning, poor planning, lack of written plans and prioritizing are often cited as factors leading to failure of SMEs (Orser et al, 2000:47).

- **BV = Value chain management**

Nieuwenhuizen & Kroon (2002:159) state that successful SMEs strive to keep good supplier and value chain relationships. On the other hand, problems with resource suppliers including inventory turnaround time, quality control and securing credit from suppliers have been cited as factors leading to failure of the SME (Fielden et al, 2000:301).

- **EC = Creativity**

The ability to be creative is very important for successful business performance in a competitive and increasingly demanding world (Pretorius et al, 2005a:56; Nieuwenhuizen & Kroon, 2003:139; Hankinson, 2000:94).

- **EI = Innovation**

Man et al (2002:127) puts forward that successful entrepreneurs have the ability to innovate in the light of the fast-changing environment. Thus most successful SMEs incorporate innovation for new ideas, opportunities, services, products and processes as they implement their business plans (Pretorius et al, 2005a:56; Rwigema & Venter, 2004:112).

- **EO = Opportunity recognition**

Economic success occurs when good managerial practice is combined with enterprising qualities that optimize the identified opportunities and resources available (Kodithuwakhu & Rosa, 2002:436; Robertson et al, 2003:311).

- **EM = Role model interpretation**

Freeman (2000:375) suggests that access to role models who have experience in the field is regarded as important for SME performance.

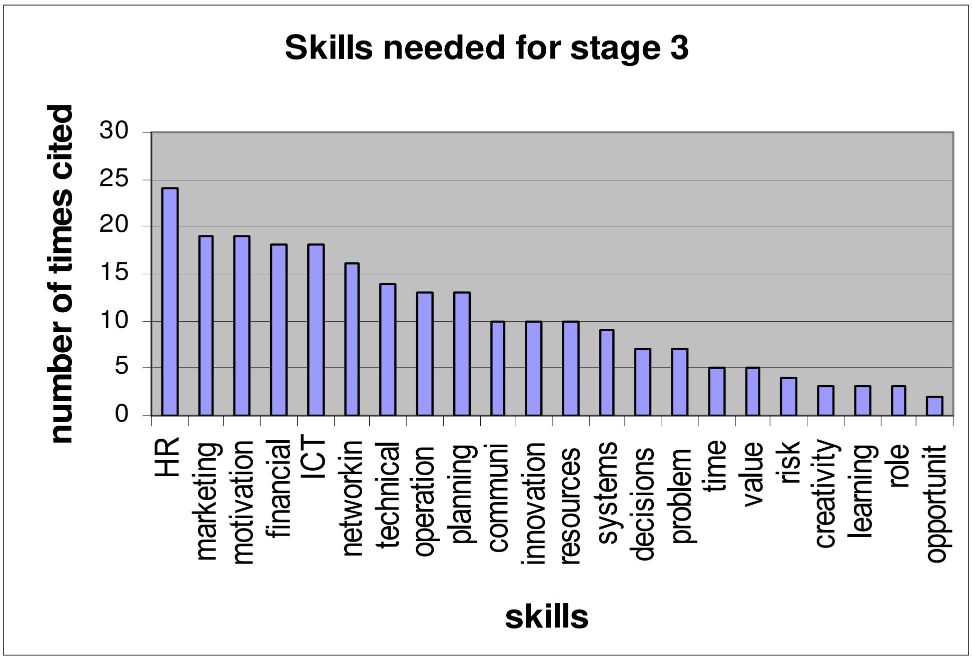
- **EG = Ability to gather and control resources**

Rwigema & Venter (2004:34) agree with Timmons (1999:38) that successful SMEs have the ability to manage and control scarce resources, to keep low overheads, increase productivity and nurture the quality of resources. On the other hand less successful SMEs lack effective control systems (Strydom & Tustin, 2003:2).

- **ER = Calculated risk taking**

Most successful SMEs are run by entrepreneurs with competence to gauge risk associated with various strategies and are capable to take calculated risks plus be able plan for contingencies (Rogerson, 2001a:137; Baron, 2004b:224). Figure 3.7 below illustrates the number of times each skill category was cited by the 100 authors reviewed:

Figure 3.7: Skills required for stage 3 of the entrepreneurship process



More than 10% of the 100 authors reviewed citing HR, marketing, motivation, technical, financial, ICT, networking, operations, planning, communication, innovation and gathering resources skills as important for stage 3 of the entrepreneurship process. This implies that the integrated model equation 2.21 **↑E/P = F(key skills) x (1 + H(supporting skills)),** can be adapted such that the equation describing the key skills for stage 3 will read as equation 3.3 below:

$$\textbf{F(Key skills in stage 3)} = [u.BH \times t.BM \times a.PM \times d.T/S \times s.BF \times BI \times z.BN \times \alpha.BO \times \beta.BP \times f.PC \times o.EI \times q.EG) \qquad (3.3)$$

3.3.4 Entrepreneurial Process - Stage 4

The last stage in the entrepreneurial process relates to that which facilitates the continued survival of the firm, which may lead to its expansion to some optimum size determined by the market demand (Glancey, 1998:18; Larsson et al, 2003:205). Growth is critical to entrepreneurial success and distinguishes the entrepreneurial venture from the small business (Wickham, 2001:303; Rwigema & Venter, 2004:36; Nieman, 2006:188).

Perks & Struwig (2005:171) alerts to the problem of defining growth of a business because uncertainty exists about what growth comprises. The *Oxford Dictionary* defines growth as “An industry that is developing particularly rapidly; a company stock that tends to increase in capital value rather than yield high income”. Synonymous with growing are the terms booming, rising, increasing, maturing and developing.

There are five indicators for growth: financial, strategic, structural, organizational and image indicators (Wickham, 2001:304; Rwigema, 2004:437; Nieman, 2006:189; Gundry & Welsh, 2001:462) as briefly described below:

- Financial growth relating to increases in turnover, costs and investment needed to achieve the turnover, profits, business assets and all related value added.
- Strategic growth relating to changes taking place through mergers and acquisitions, exploiting of new markets, new products and new opportunities.
- Structural growth relating to the changes taking place in the way the business organizes its internal systems with regard to managerial roles, increasing employees

and their responsibilities, reporting relationships, communication links and increased use of internal systems to control resources.

- Organizational growth relating to changes taking place in terms of processes used, the organization's culture, management attitudes towards staff, as well as changes regarding the entrepreneur's role as the business moves from small to large.
- Image growth which relates to the changes taking place in the small business such as becoming more formal (e.g. having formal business premises), moving to newly built premises, redecorating the premises and moving to a new environment.

The activities undertaken in the growth process are linked to five strategic growth intentions, namely market expansion, technological change, garnering resources, operations, and organizational development (Man et al, 2002:127; Gundry & Welsch, 2001:462; Rwigema & Venter, 2004:40).

- **Market expansion**

For businesses to grow they have to reach a wider business environment by expanding existing opportunities, discovering new ones, selling to new markets, expanding distribution channels, expanding advertisement and promotions as well as continuously adapting products to changing tastes. Discovery of new opportunities depends on continually scanning the changing business environment and preparing to exploit these opportunities ahead of, or not far behind competitors.

- **Technological change**

Technological change includes acquiring new equipment, computerizing current operations, upgrading computer systems, replacing present equipment. It also includes keeping up with the increases in technical knowledge.

- **Garnering resources**

Growth is dependent on the venture's ability to attract new resources. For this stage garnering resources includes evaluating whether the company has the resources to fund the growth strategy, taking action, taking new risks, setting linkages with external factors, consolidating available cash on hand, seeking additional financing, seeking professional advice, exploring a wider range of financing resources, applying for a loan, securing a loan, distributing finance for financing resources.

- **Operations**

This is the phase where the team is continuously revisiting and streamlining every operational aspect, from service quality to public relations. Operations aimed at growth include being product/service-focused and growing the firm's specific competences and skills to overcome constraints and complacence and to deploy resources optimally. This includes operations planning, adding operating space, expanding current facilities, redesigning layout and adding specialized employees.

- **Organizational development**

Growth is depended on the company structure and the development of the organization towards increasing the firm's competitive advantage. The venture cannot afford to acquire assets and set up structures and systems that are incapable of evolving as the organization develops. As a venture grows, so does the structure, until a complex structure emerges.

Skills required for success in stage 4

The most important issue in pursuing growth is whether the entrepreneur has the skills it requires (Nieman, 2006:194; Tustin, 2001:126; Simpson et al, 2004:485). From the 100 authors reviewed the following skills were identified as needed this stage are:

- **Technical Skills (T/S)**

During the growing stage, technical skills and vocational abilities are paramount (Rwigema & Venter, 2004:41, Tustin, 2003:26).

- **PP = Problem solving**

Darroch & Clover (2005:326) identify problem solving skills such as conflict resolution and overcoming stress as key abilities for successfully growing SMEs. On the other hand, the lack of problem-solving skills are cited by MacMahon & Murphy (1999:35) as factors that hinder the growth of SMEs.

- **PA = Adaptability to change**

During the growing phase, ambiguity is high with the changes in technologies, markets, competitors, personnel and other variables (Morris & Zahra, 2000:93). Probst & Raisch, (2005:101) surmise that successful entrepreneurs are able to manage change and they are able to anticipate, execute plus monitor the change towards SME growth.

- **PL = Learning abilities**

The ability of the entrepreneur and / or of the entrepreneurial team to learn is crucial to the growth process (Deakins & Freel, 1998:149; Larsson et al, 2003:210). Successful ventures become learning, flexible organizations that continually adapt the range of potential behaviours to changing opportunities (Rwigema & Venter, 2004:36; Sackett et al, 2003:299).

- **PN = Numeracy and literacy**

Strydom & Tustin (2003:9) argue that inadequate literacy / numeracy skills impact negatively on the growth of small business.

- **PM = Motivation (need for achievement)**

Situational-specific motivation specifically the need to grow is cited as possible predictors of firm growth (Durand, 1975:77). Urban & van Vuuren (2006:3) advise that this stage of the entrepreneurship process requires the entrepreneur to be to motivate themselves and the team to continuous commitment and initiative.

- **PT = Time management**

Rwigema & Venter (2004:46) deliberate that time must be managed productively, effectively and efficiently during the growth stage of a business.

- **PC = Communication skills**

Nieman (2006:196) notes that successful entrepreneurs are able to express their vision for growth clearly and efficiently. On the other hand the lack of communication skills hinders the growth of SMEs (Strydom & Tustin, 2003:10; Perks & Struwig, 2005:183).

- **PG = Negotiating skills**

In order to grow their companies, entrepreneurs must look beyond short-term victories to lasting mutually beneficial gains and build long-term relationships with suppliers, bankers, directors, managers, shareholders, customers (negotiating contracts or tenders), distributors, unions and other stakeholders (Rwigema & Venter, 2004:51; Nieman, 2006:197).

- **PD = Decision making skills**

The key to new venture growth lies in the ability of the owner/manager to make quick and correct decisions (Morris & Zahra, 2000:93; Hankinson, 2000:94; Markham & Baron, 2003:287). Entrepreneurs, by virtue of their superior decision-making abilities, can create growing firms (Glancey et al, 1998:265).

- **BB = Business systems management**

High growth-oriented entrepreneurs tend to have formal organizational structures and systems (Gundry & Welsch, 2001:454; Simpson et al, 2004:485). Viviers et al (2001:8) asserts that applications of business systems and processes enable the owner-manager to adopt a hands-off management style more appropriate for growing businesses.

- **BG = General management**

Successful entrepreneurs are adept at efficiently general management, a factor that becomes increasingly important as pluriactivity increases (Kodithuwakhu & Rosa, 2002:443). Larsson (2003:206) and Schamp & Deschoolmeester (1998:154) list planning, executing (organizing and leading) and monitoring (or control) as general management skills key to growing an SME.

- **BF = Financial management**

Credit and cash flow management, bookkeeping, financial insight and basic financial management are additional areas that need the entrepreneur's attention in the growing stage (Timmons, 1999:251, Pretorius & Shaw, 2004:222).

- **BI = ICT skills**

In a world of global competition, the use of IT can assist in driving the SME from the spectre of failure past mere survival into growth by enabling the SME to tap into global information networks and markets (Baard & Van den Berg, 2004:2; SME survey, 2003; Chapman et al, 2000:354, Goolnik, 2002, Sackett et al, 2003:298). SMEs who fail to apply ICT business solutions find themselves competing in business environments that are becoming increasingly dependent on information technology (Fielden et al, 2000:303; Marri et al, 2003:155).

- **BM = Marketing**

High-growth entrepreneurs have strategic intentions that emphasize market growth and the actual marketing expertise (and understanding of marketing) needed to become competitive (Gundry & Welsch, 2001:462; Freeman, 2000:373; Pretorius & Shaw, 2004:222; Wasilczuk, 2000:89).

- **BN = Networking**

Strong networks (social, public and professional) and practices of networking foster venture growth (Drakopoulou, 2002:117; Jansen, 2003:1). Batjargal (2006:317) concurs with Senjem & Reed (2002:1) and Zhao & Aram (1995:349) that most successful entrepreneurs belong to at least one formal network. Networking allows the entrepreneur to take advantage of the changes in the market (Miller et al, 2003:228) and the diversity of information to develop new opportunities (Harris, Forbes & Fletcher, 2000:141; Hite, 2005:113).

- **BO = Operational**

High-growth entrepreneurs have great concern for reputation and high-quality work and therefore most have high operational skills (Pretorius & Shaw, 2004:222; Nieuwenhuizen & Kroon, 2002:159).

- **BR = Research and development**

Gundry & Welsch (2001:462) state that successful entrepreneurs conduct research that helps them adapt products and technology to changing needs.

- **EC = Creativity**

Freidrich et al (2003) argue that in the later stage in the entrepreneurship process, creativity should continue if the competitive advantage is to be sustained.

- **EI = Innovation**

Dess et al (1999:91) proclaim that key to the growth of the firm is the portfolio of income-generating initiatives. Marri et al (2003:151) and Schamp & Deschoolmeester (1998:154) concur that this is dependant of the planning of innovation, the development of new innovative products and innovative techniques. This is so as to defend their turf, uphold profitability, to gain new markets, to keep up with environmental changes as well as to avoid becoming redundant or extinct (Mueller & Thomas, 2001:57). Freel &. Robson (2004:561) findings highlight a positive relationship between novel product innovation and employment growth.

- **EO = Opportunity recognition**

Rwigema & Venter (2004:41) deem this stage of the entrepreneurship process as demanding of skills that enable the SME to find and develop more and new opportunities. Entrepreneurs need skills that enable them to identify opportunities to increase core market share (Man et al, 2002:134); increase volume of sales (Gundry & Welsch, 2001:462); develop new products (Wickham, 2001:304); enter new markets (Erikson, 2002:281); diversify (Nieman, 2006:189); integrate (Robertson et al, 2003:311); form strategic alliances (Deakins & Freel 1998:148); expand distribution channels (Perks & Struwig, 2005:182) and advance technical applications (Gruber, 2002:193).

- **EG = Ability to gather and control resources**

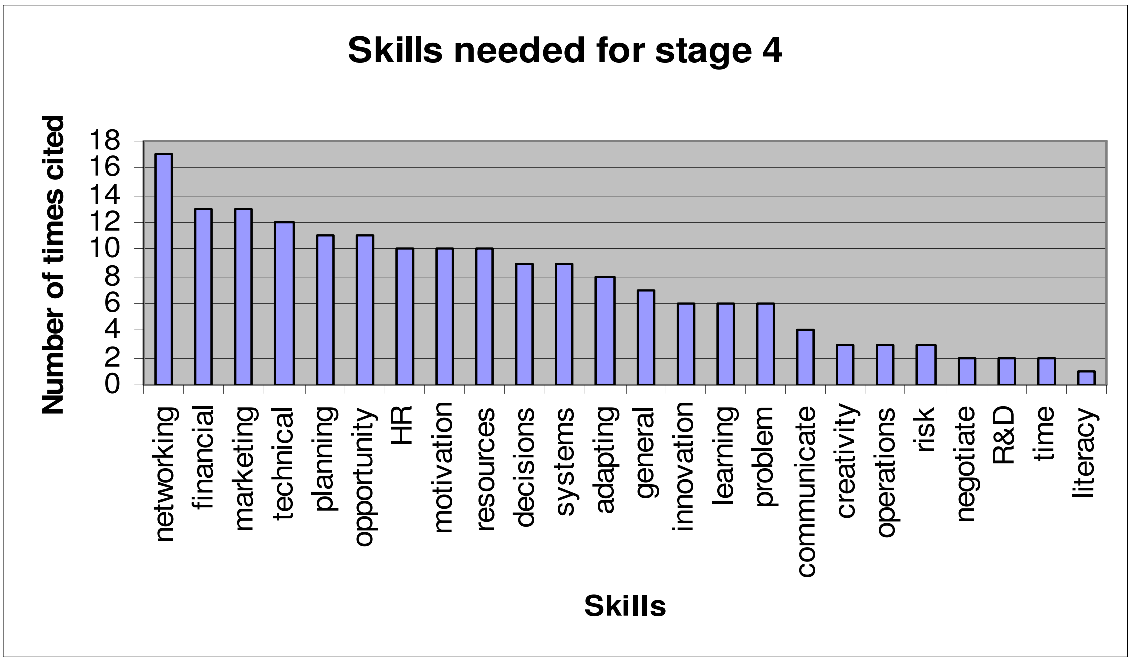
High-growth entrepreneurs have the ability to secure adequate capitalization competitively (Gundry & Welsch, 2001:462; Rwigema & Venter, 2004:46). Furthermore the effective management of these resources is critical to SME growth (Gbadamosi, 2002:97; Probst & Raisch 2005:101; McMahon, 2001:12).

- **ER = Calculated risk taking**

Successful entrepreneurs are able to take new risks in order to grow their companies (Man et al, 2002:132). They use different strategies like pluriactivity to manage risk and they plan more frequently leading to generally better risk control (Schamp & Deschoolmeester, 1998:161; Kodithuwakhu & Rosa, 2002:455).

Figure 3.8 below illustrates the number of times a skills category was cited by the 100 authors reviewed:

Figure 3.8: Skills required for stage 4 of the entrepreneurship process



More than 10% of the 100 authors reviewed cited networking, financial, marketing, technical, planning, opportunity, HR, motivation and the gathering of resources skills as important for stage 4 of the entrepreneurship process. This implies that the integrated model equation 2.21 ↑**E/P = F(key skills) x (1 + H(supporting skills)),** can be adapted such that the equation describing the key skills for this stage 4 will read as equation 3.4 below:

F(Key skills for stage 4) = [z.BN x s.BF x t.BM x d.T/S x β.BP x u.BH x a.M x q.EG). (3.4)

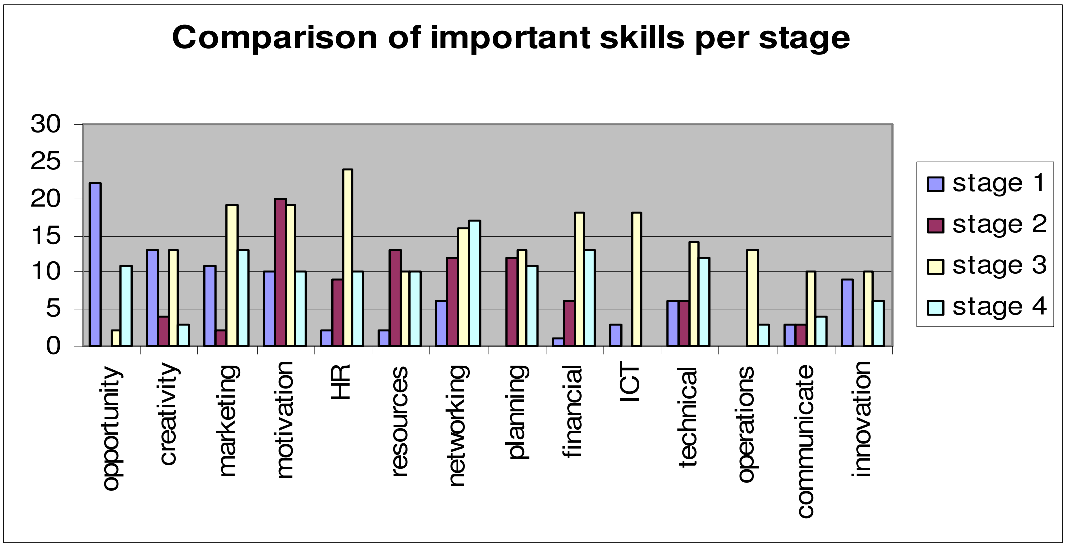
3.4 Summary and propositions

From the above discussions the following observations can be drawn.

1. Only motivation was deemed as an important skill for all the stages of the entrepreneurship process.

2. Marketing is very important in stage 1, 3 and 4 of the process.
3. Gathering of resources, planning and networking were considered important for stages 2, 3 and 4.
4. Opportunity identification is deemed as very important for stage 1 and 4.
5. Human resources management, financial management and technical skills are deemed as important for stages 3 and 4.
6. Creativity is deemed to be important for stage 1 and 3.
7. Communication, operations and innovation skills are deemed as key for stage 3.

Figure 3.9: Citations of important skills per stage



This review is in line with Sullivan's (2000:164) top ten skills per stage. The seven skills identified in chapter 2 namely opportunity identification, marketing, motivation, human resources, financial management, gathering of resources and technical skills have all been identified as important for at least two of the four stages of the entrepreneurial process. So the propositions on key skills can be verified. This means it is valid for the study to investigate whether these seven skills are important for SMEs irrespective of the stage of the entrepreneurship process the SME may be in at the time of the interview.

Furthermore another seven skills were also cited as important for at least one of the four stages. These seven were creativity, networking, planning, ICT, operations, innovation and communication. Networking and planning were deemed as important for three of the four stages, while others like innovation, ICT and innovation were considered important only for one stage. This made it necessary for this study to investigate whether on skills identified in Chapter 2 as supportive were in fact key skills.

The following were thus added to the propositions the study sought to prove / disprove.

Propositions K1. The following skills are not likely to be considered to be key skills:

- Marketing
- Finance
- Human resource
- Motivation
- Gathering of resources
- Opportunity identification
- Technical

Propositions S1. The following skills are not likely to be considered as supportive:

- Motivation skills
- Adaptability to change
- Problem solving
- Numeracy and literacy
- Communication
- Decision making
- Negotiating
- Learning abilities
- Time management
- Business systems
- Business linkages
- Computer literacy
- Legal
- Operations management
- Research and development
- Strategy and business planning
- Supplier management
- Risk taking
- Role models

3.5 Conclusion

Chapter 3 conducted further exploration study to investigate whether the skills identified in chapter 2 did indeed apply to all the four stages of the entrepreneurship process. The chapter finds that only motivation is considered key for all stages while other skills that were identified as key may be important for one or two stages. So the researcher incorporated into its study propositions to investigate whether the skills identified have been categorized correctly as important or supportive and if these categories apply irrespective of the stage of the entrepreneurship process the SME may be in at the time of the interview.

From the model and the exploratory study chapter 3 posits that in a given set of competencies some are key skills and some are support skills.

The next chapter briefly looks at training as a method of acquiring key and supportive skills to enhance SME and entrepreneurial development.