



Entrepreneurship Development and Tacit Knowledge: Exploring the Link between Entrepreneurial Learning and Individual Know-How

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Abstract

Tacit knowledge is created in the mind as individual know-how and expressed as innovation. The process that facilitates the creation of individual know-how is entrepreneurship development. Entrepreneurial learning as a method of entrepreneurship development facilitates the creation of individual know-how better than entrepreneurship education as it is both experiential and socially interactive. Thus, entrepreneurial learning leverages innovation. Since today's society is technologically driven and the markets innovation conscious, there is therefore the need to have today's nascent (budding) entrepreneurs or protégés go through a specific and identifiable process that will enhance their tacit knowledge. This study theoretically provided a link between entrepreneurial learning and individual know-how. Empirically, the study investigated the relationship between tacit knowledge and the dimensions of entrepreneurship development. The survey data were collected from nascent (budding) entrepreneurs or protégés who are learning their chosen vocation in entrepreneurial learning oriented firms. The generated data were analysed using multiple regression. The result revealed that the dimensions of entrepreneurship development are significantly related to tacit knowledge. Consequently, concerted efforts should be directed towards using experts or network providers to develop the individual know-how of nascent (budding) entrepreneurs or protégés. This is to ensure that the nascent (budding) entrepreneurs or protégés have well developed tacit knowledge that will translate to innovative products and/or services in their chosen vocation.

Keywords: Entrepreneurship Development, Entrepreneurial Learning, Individual Know-How, Innovation, Tacit Knowledge

Introduction

Knowledge is the awareness, identification and applied know-how that we all possess. It is an essential resource that is also transformed to other manifestations – such as books, technology, practices and traditions – within organizations of all kinds and in society in general. Knowledge is one, if not the principal element that styles our personal, organizational and societal intelligent behaviour (Wiig, 2003). Knowledge is created in the minds of people and increases when people are involved in its acquisition and dissemination. Thus, previous knowledge enhances the formation of new knowledge (MacDermout, n.d., as cited in Nasimi et al., 2013). Knowledge is described as dynamic, since it is created in social interactions amongst individuals (Nonaka et al., 2000). This knowledge that is created in people's mind is referred to as tacit knowledge; it resides in individual know-how or individual skills, previous experiences of collaborations and their social context. Many of these skills and social arrangements are related to work activities (Alwis and Hartmann, 2008).

All knowledge is either tacit knowledge or is rooted in tacit knowledge, that is, explicit knowledge is encompassed by tacit knowledge, while tacit knowledge “possesses” itself (Kikoski and Kikoski, 2004). Tacit knowledge is made visible through its application and can then be utilized in the innovation process (Leonhard and Sensiper, 1998). The growing interest in innovation and its relationship to economic growth has resulted in innovation management becoming more abstract by focusing on the management of processes in the search for novel assignments through the combination and integration of different knowledge components. In recent literature, innovation is viewed in terms of the transfer of knowledge (Scarborough, 2003; Alwis and Hartmann, 2008). Tacit knowledge often allows us to perform at a higher level than that which our explicit knowledge does. Novices cannot become experts simply by exposure to explicit information; they need experience with the activity itself (Lubit, 2001). Lubit further noted that the word “skill” implies tacit knowledge. People need to repeatedly practice skills, receive feedback and get the feel for them.

Entrepreneurship education plays a prominent role in providing the opportunity for nascent (budding) entrepreneurs or protégés to gain tacit knowledge and skills needed to start-up a new venture and to manage it successfully. More so, entrepreneurship education: increases nascent (budding) entrepreneurs' or protégés' interest in becoming entrepreneurs at some stage after graduation (Friedrick and Visser, 2005); provides nascent (budding) entrepreneurs' or protégés' with competencies that enhances entrepreneurial key skills, intention to create a new venture and business ownership (Dixxon et al., 2005); and provides opportunities for students to exercise significant responsibilities which affects their desire to step into entrepreneurship (Peterman and Kennedy, 2003). This method of entrepreneurship development is referred to as traditional and repetitive. Applying the traditional and repetitive method makes students to get bored and distracted easily. The nascent (budding) entrepreneurs' or protégés' are bored because they are not actively and fully engaged in the process of learning (Fiet, 2000). Hence, the emergence of a new method of entrepreneurship development known as entrepreneurial learning. Entrepreneurial learning is a dynamic and constant process of acquiring, assimilating and organizing the new information and knowledge with pre-existing structures (Rae and Carswell, 2000; Minniti and Bygrave, 2001; Cope, 2005; Harrison and Leitch, 2005).

The paradigm shift from entrepreneurship education to entrepreneurial learning is premised on the fact that acquiring tacit knowledge requires having considerable experience in an activity, preferably while working with experts. Observing how experts address problems, along with practicing how to address problems and receiving feedback on our methods of doing

so, fosters tacit knowledge. These activities help us both consciously and unconsciously to absorb guidelines concerning what to focus on, how factors are causally related, and how to address problems. The guidelines are a key part of what we refer to as judgement (Lubit, 2001). Consequently, the purpose of this paper is to theoretically develop a link between entrepreneurial learning and individual know-how, and empirically examine the relationship between entrepreneurship development and tacit knowledge.

2. Underpinning Theories

This research is underpinned on the Bandura's social learning theory and the Kolb's experiential learning theory.

2.1 Bandura's Social Learning Theory

The Social Learning Theory (SLT) posits that individuals learn from one another through observation, imitation and modeling (Bandura, 1977, as cited in Bandura, 1997). Bandura (1962, as cited in Huitt and Monetti, n.d.), building on the earlier work of Miller and Dollard, proposed that learning first occurs cognitively through imitation, and then is modified through the application of consequences. In contrast to a purely behavioural approach, social cognitive theorists propose that individuals are active participants in their own learning. Based on a series of studies during the 1960s and 1970s, Bandura in 1977 proposed a four-step process on how individuals learn by observing others' behaviour. This process has been referred to as observational learning or modeling, and involves: (i) attention – the individual notices something in the environment; (2) retention – the individual remembers what was noticed; (3) reproduction – the individual produces an action that is a copy of what was noticed; and (4) motivation – the environment delivers a consequence that changes the probability that the behaviour will occur again (reinforcement and punishment) (Bandura, 1997).

Through the careful observation of others, individuals learn numerous new behaviours such as emotional reactions and how to use tools in their environments (Huitt and Monetti, n.d). Bandura (1965, as cited in Rollinson, 2008) demonstrated that individuals modify their own behaviours based on the consequences (e.g., reinforcement or punishment) that others receive. Bandura called this phenomenon vicarious learning. Individuals tend to model their behaviour on persons who are either reinforced for their behaviour or not punished for it.

According to Asher (n.d) competent models reduce the risk of learning new behaviour because, usually, actions guided by following good examples are more likely to be successful. This type of learning is not exclusively imitative but can result in innovative behaviour when opportunities exist to observe models. Asher further noted that people are selective in the behaviour they reproduce, an indication that imitation is as much due to imagined utility as it is to immediate reinforcement. Not all models are copied, only those whose behaviour is judged to have some usefulness, based on past social learning. Observers learn to appraise models on situational cues, such as socio-economic indicators, experience, age and sex.

The probability for successful modeling is enhanced by the following procedural steps: (1) specific identification of the desired behavioural outcomes; (2) selection of an appropriate model; (3) determination that the "learner" has the necessary skills and resources to perform the

desired behaviour; (4) creation of a favourable learning environment; (5) modeling the desired behaviour and its consequences; (6) giving rewards for progress in learning; and (7) strengthening new behaviour by scheduling future reinforcers (Luthans and Kreitner, 1995).

2.2 Kolb's Experiential Learning Theory

Experiential learning exists when a personally responsible participant cognitively, affectively and behaviourally processes knowledge, skills and/or attitudes in a learning situation characterized by a high level of active involvement (Hoover and Whitehead, 1975, as cited in Gentry, 1990). Gentry further noted that experiential learning is participative, interactive and applied. It allows contact with the environment and exposure to processes that are highly variable and uncertain. It involves the whole-person; learning takes place on the affective and behavioural dimensions as well as on the cognitive dimension.

Kolb's Experiential Learning Theory (ELT) is noted in the earlier works of John Dewey, Kurt Lewin and Jean Piaget (Taylor, 2001; Harrelson and Leaver-Dunn, 2002; Penrose, 1959). According to Kolb, learning is the process in which knowledge is created through transformation of experience. Kolb described the learning process as: concrete experience – doing; reflective observation – observing; abstract conceptualization – thinking; and active experimentation – planning. Kolb stated that in the concrete experience phase, the individual or organization just does the task without reflecting on it. During the reflective observation phase, the individual returns to the beginning point of the task to review what has been done or tried, asks questions, discusses and shares the experience gained. Kolb further stated that during the abstract conceptualization phase an attempt is made by the individual to find answers to the reflection questions; here, learning involves more logic and ideas than feelings of understanding the problems or the situation. The planning (active experimentation) phase gives the individual an opportunity to master the new understanding and prediction of what is likely to happen later or what other actions must be taken to improve the way the task was treated. Experiential learning in the planning phase has an active form – experimenting, influencing or changing the situation. Thus, the individual needs to have practical approach and to be interested in what is actually working.

2.2 Entrepreneurship Development

Entrepreneurship development is the process of actualizing an innovative intention by an individual or group of individuals in either a new or old enterprise through networking to acquire the requisite capabilities that will enhance the success of the venture in the face of environmental uncertainties (Agbim and Oriarewo, 2012). It is evident from the Agbim and Oriarewo definition that entrepreneurship development has four dimensions: entrepreneurial intention; entrepreneurial networking; entrepreneurial capabilities; and entrepreneurial success. Also, according to Agbim and Oriarewo (2011) entrepreneurship is comprised of the entrepreneur, entrepreneuring and the enterprise. The entrepreneur is the individual or group of individuals who combine resources based on new ideas so as to add value to a new/existing product and/or add innovation in services rendered. Entrepreneuring is the entrepreneurial process in entrepreneurship development, while the enterprise is the outfit through which the products/services are delivered to the society.

Entrepreneurial intention is the first step in new business formation (Lee and Wong, 2004); it is typically considered to be formed by a person's attitude toward entrepreneurship, the prevailing social norms attached to entrepreneurship, and the person's level of self-efficacy. Self-efficacy is a person's cognitive estimate of his/her capabilities to mobilize the motivation, cognitive resources and courses of action needed to exercise control over events in his/her life (Bandura, 1986). A person's intention to become an entrepreneur offers the best predictor of the person actually engaging in entrepreneurship in the future (Delmar and Davidsson, 2000). Thus, entrepreneurial intention is a conscious state of mind that directs attention (and therefore experience and action) toward a specific object (goal) or pathway to achieve it (Bird, 1989).

Networking, generally, enables people to get the right information, shrink operational expenditures by permitting the organization of actions and makes possible combined decision-making (Grootaert and Van Bastelaer, 2001). In addition, the nascent (budding) entrepreneur or protégé according to Hellman and Puri (2002) is exposed to finance and experienced workforce that ensure entrepreneurship development and sustenance through networking. Entrepreneurial networks therefore creates a relationship between the nascent (budding) entrepreneur or protégé and the networks of their desired line of business at the start-up (Zhao and Aram, 1995). When the entrepreneurial networks of entrepreneurs begin to contribute to their entrepreneurial goals, these social contacts becomes their social capital (Burt, 1992). It has been established that persons with entrepreneurial intentions and who are exposed to various skills through entrepreneurial networking can gain access to useful information and even finance from the existing sources (Johannisson, 2000) and take measures to develop their entrepreneurial capabilities and by extension their own businesses (Tian, et al., 2009; Hunjra et al., 2011; Agbim and Oriarewo, 2012).

Capabilities consist of the ability to adequately manage resources to perform a task within an enterprise (Barba-Sanchez and Atienza-Sahuquillo, 2010). However, Hall (1992) used the terms skills, capabilities, competencies and know-how interchangeably. Therefore, entrepreneurial capabilities are the requisite skills needed by an entrepreneur (nascent or experienced) to start-up and sustain an entrepreneurial intention. These capabilities are dynamic because of the dynamism in the business environment. Thus, the capabilities possessed by both nascent (budding) or experienced entrepreneurs at any point in time are contingent on the turbulence in the business environment. Entrepreneurial capability according to Treece et al. (1997) is developed by means of a specific and identifiable process. Golden and Powell (2000) described entrepreneurial capability as the flexibility to alterations. Ravichandran and Lertwongsatein (2005) further asserted that flexibility facilitates individuals and companies to swiftly and efficiently use state of the art technologies to constantly maintain existing businesses. Additionally, strategic flexibility is a type of vibrant entrepreneurial capability, which assists a person or a firm identify and grab opportunities (Herreld et al., 2007).

There are four entrepreneurial capabilities that are intertwined with the environment: (1) technological skills. These skills have been viewed in different ways in literature. But, majorly, it has been described by Hisrich (1992) as writing, oral communication, technology, interpersonal, listening, organizing ability, network building, coaching, team work and environmental monitoring skills; (2) Management skills. It connotes planning, organizing, leading and coordination skills (Agbim, 2013); (3) personal entrepreneurial skills. Hisrich (1992) described personal entrepreneurial skills as inner control/discipline, risk taking, innovativeness, change orientation, persistence, imagination, drive, flexibility, competitiveness, optimism and courage; (4) Entrepreneurial leadership skills. These are skills needed to gain

competitive advantage through value creation that is based on newly discovered opportunities and strategies (Schulz and Hofer, 1999).

The proper utilization of these opportunities gives rise to entrepreneurial success. Entrepreneurial success implies positively affecting the lives of others and making a living through a well managed innovative product and/or service (Agbim and Oriarewo, 2012). Entrepreneurial success has also been viewed as: starting and achieving some benefits from a business; adding value to employees, customers and the larger community; doing something you love; finding meaning and purpose in work; and helping others (Maxwell, 2003; Kauanui et al., 2009, as cited in Agbim et al., 2013).

2.3 Entrepreneurial Learning

Some scholars believe that entrepreneurial learning occurs through experiencing different challenging events such as recognizing opportunities, coping with problems, and performing different roles of an entrepreneur (Minniti and Bygrave, 2001; Erikson, 2003; Politis, 2005; Cope, 2005; Pittaway and Cope, 2007). In this sense learning is an indispensable reaction to new venture dynamics of change and a central element of success (or failure) in start-up situation (Fayolle and Gailly, 2008). Rae (2006) explained learning as an integral part of entrepreneurial process in which human and social factors are as important as the economic factors.

Entrepreneurial learning is widely understood as how people acquire knowledge and enact new behaviours in the process of recognizing and acting on opportunities and of organizing and managing ventures (Maples and Webster, 1980; Rae and Carswell, 2000). Most of the learning that takes place within an entrepreneurial context is experiential in nature (Deakins and Freel, 1998; Sullivan, 2000; Minniti and Bygrave, 2001; Sarasvathy, 2001). Entrepreneurial learning has also be defined as a dynamic and constant process of acquiring, assimilating and organizing the new information and knowledge with pre-existing structures (Rae and Carwell, 2000; Minniti and Bygrave, 2001; Cope, 2005; Harrison and Leitch, 2005). Rae (2006) defined entrepreneurial learning as a dynamic process awareness, reflection, association and application that involves transforming experiences and knowledge into functional learning outcomes. It is therefore evident that the commonest feature of the definitions of entrepreneurial learning is experience.

2.4 Tacit Knowledge and Tacit Knowledge Management

There are two types of knowledge: explicit knowledge and tacit knowledge (Alwis and Hartmann, 2008). Tacit knowledge entails information that is difficult to express, formalize or share. It stands in contrast to explicit knowledge, which is conscious and can be put into words. An individual experiences tacit knowledge as intuition, rather than as a body of facts or instruction sets he/she is conscious of having and can explain to others. Tacit knowledge is “knowing how”, while explicit knowledge is “knowing that” (Lubit, 2001). Tacit knowledge is now the knowledge management term typically used to describe the knowledge that is in people’s heads or in their own file, as distinguished from explicit knowledge that exists in documents or databases (Koenig, 2003). Tacit knowledge resides in human mind, behaviour and perceptions and cannot be easily expressed. It is developed through experience and only understood through participation and observation (Nonaka, 199; Duffy, 2000; Wei et al., 2009). Nonaka and Takeuchi (1995) asserted that tacit knowledge is hidden and therefore evolves through the interactions of skills and practice. Dalkir (2005) underscores the properties of tacit

knowledge as: ability to adapt; to deal with new and exceptional situations; expertise, know-how, know-why and care-why; ability to collaborate, to share a vision, to transmit a culture; coaching and mentoring to transfer; experiential knowledge on a one-to-one, face-to-face basis. Furthermore, tacit knowledge is personal and hard to formalize, and therefore difficult to communicate to others (Nonaka and Konno, 1998). Tacit knowledge is rooted in action, procedures, commitment, values and emotions. It is the less familiar, unconventional form of knowledge and the knowledge to which we are not conscious of. Tacit knowledge is not codified and not communicated in a “language” (Hall and Adriani, 2002; Kikoski and Kikoski, 2004). Tacit knowledge embodies an individual’s education, natural talent, experience and judgement (Kikoski and Kikoski, 2004). Tacit knowledge is non-codified and disembodied know-how (Howells, 1996). Tacit knowledge is usually part of a long-term, accumulated learning process that is often the beginning of a more systematic scientific understanding of a technology or process (Senker, 1993). It enables an increased perception of ideas therefore, it stimulates creativity and has a positive effect on business activities (Rudiger and Vanini, 1998). The different definitions and attributes of tacit knowledge point to the fact that there are different aspects of tacit knowledge. These various aspects relate to the import of tacit knowledge in creating new knowledge and innovation. However, this can be enhanced in an informal/socially interactive learning condition that facilitates the transfer of tacit knowledge.

Transfer of tacit knowledge strongly depends on the distinction between face-to-face and arm’s length relationship (Spring, 2003). The closeness of two partners is key to the degree of tacit knowledge transfer (Cavusgil et al., 2003). Much tacit knowledge is generated and transferred through body language or physical demonstrations of skills (Leonhard and Sensiper, 1998). Tacit knowledge is acquired by sharing experience, by observation and imitation (Hall and Adriani, 2002). Tacit knowledge can only evolve through practical experience (Learning-by-doing) or personal interaction with experts who possess the relevant experience or knowledge in social networks (Senker, 1993).

Tacit knowledge is acquired via the informal take-up of learned behaviour and procedures (Howell, 1996). Sharing tacit knowledge will be more successful in informal settings than in formal ones (Alwis and Hartmann, 2008). Tacit knowledge is unconsciously acquired from the experiences one has while immersed in an environment. Tacit knowledge develops when unconscious, inductive mental processes create a representation of the structure of the environment showing the relationship between important variables. In other words, people can have unconscious abstractions, that is, people can learn about the underlying complex structure of systems without being conscious of doing so or being able to articulate their understanding (Lubit, 2001). Learning is particularly crucial in relation to difficult-to-acquire tacit knowledge, which may explain why tacit knowledge is often identified as being derived primarily from in-house capacity and efforts. Tacit knowledge can be activated by generating new scientific knowledge (learning-to-learn), by incorporating new knowledge in the process of learning new production methods and improving existing technology through minor improvements based on learning-by-doing, and based on learning-by-using (Senker, 1993; Howell, 1996).

Szulanski (2003) alluded to the “stickiness of knowledge” when transferring knowledge from one practice to another. The aspect of “stickiness” involves the knowledge source, the knowledge recipient and the context. When the knowledge source and the knowledge recipient share the same context and are engaged in the same practice, the “stickiness” will be relatively low, whereas the transfer will be more difficult and will increase in cost when the knowledge

source and the knowledge recipient operate in different contexts and are engaged in different practices.

The complex nature of the innovation process has been analysed by several authors. Tornatsky et al. (1998) described the process of innovation as a process of many discrete decisions and behaviours that unfold slowly over time. In the literature, different methods exist to define innovation. One direction underlines the novelty of an idea (Barnett, 1953; Becker and Whisler, 1967; Aregger, 1976). Another research direction focused on the new combination of needs and solutions (Pfeiffer and Staudt, 1975; Moore and Tushman, 1982; Richards, 1985). A precondition to activating tacit knowledge in the innovation process is to make sure that one is able to identify the relevant tacit knowledge (Alwis and Hartmann, 2008). This process of identifying and acquiring tacit knowledge and generating new idea or innovation is tacit knowledge management. Tacit knowledge management according to Davenport and Marchand (1999) involves information, creation of new knowledge and the management of the way people share and apply tacit knowledge. Thus, we assert that entrepreneurial learning also entails tacit knowledge management.

2.5 Dimensions of Tacit Knowledge

Nonaka and Konno (1998) have identified two dimensions of tacit knowledge: (1) technical dimension – which encompasses the “know-how”, and (2) cognitive dimension- which consists of beliefs, ideas and values which we often take for granted. Also, according to Lubit (2001) there are four categories of tacit knowledge: (1) hard to pin down skills-“know-how.” (2) mental models or schema- help us to make sense of the masses of data we are faced with, to extract those parts which are relevant, to formulate an understanding of problems, and to find solutions. (3) ways of approaching problems- tacit knowledge underlies the decision trees people use. The questions we ask ourselves when dealing with a problem are often not part of a logically thought out, deductively rigorous plan for addressing the problems. Rather, our ways of approaching problems derive from habit and the mental patterns we develop when we see how others think through problems. (4) Organizational routine – the word routine refers to regular and predictable behaviour patterns. Routines capture the tacit knowledge of those who develop them, and spread the effect of their expertise and judgement. Routines solidify as standard operating procedures and roles which are developed and enforced. For routines to continue to be a way of spreading tacit knowledge, rather than an encumbrance to the development of better practices, routines need to be periodically revisited and altered as situations change.

2.6 Entrepreneurial Learning as a Method Acquiring Individual Know-How

People acquire know-how, skills or tacit knowledge (Lubit, 2001; Kikoski and Kikoski, 2004) when they observe or participate in a situation and see how their actions, and the actions of others affect the outcome. The individual will make many potentially costly mistakes in the process. In addition, it will take the individual a very long time to develop a sense of which factors to look at, which to ignore, and what the relationships are between key factors. Furthermore, the individual may never conceive of some of the best solutions without the assistance of experts. In each of these cases, the assistance of an expert who have gathered experience and developed judgement in that area could greatly facilitate learning (Lubit, 2001). This method is associated with entrepreneurship education. This traditional method is limited in

the power to transmit tacit knowledge. The learning that occurs in this situation is largely trial and error. Although, it is a method of learning somewhat, but it is a much less powerful learning tool than frequent contact with a mentor, coach or expert – a practice which entrepreneurial learning advocates.

Many scholars believe that there is no other way to learn entrepreneurship than personal experience (Henry et al., 2005). This is because experience helps one to generate new meaning which consequently leads to change in thinking and behaviour (Fayolle and Gailly, 2008). More so, experience inspires the choice of entrepreneurship as a future career path, and enables one to face the challenges of new venture creation, growth and success (Matlay, 2005; 2006; Smith et al., 2006). Lubit (2006) asserted that coaching arrangements and opportunities to observe experts, are more efficient at conveying tacit knowledge than is trial-and-error learning. People slowly build know-how and problem solving decision trees by having experience under supervision, formulating and solving problems and by observing the thought/work processes of experts in coaching arrangements, the supervisor asks his nascent (budding) entrepreneur or protégé to relate how he/she thinks through situations. The experience garnered from such learning develops ones entrepreneurial self-efficacy, that is, the strong belief and desire to successfully perform the roles and task of an entrepreneur (Peterman and Kennedy, 2003; Zhao et al., 2005). Through the answers the protégé gives to the coach's question, the protégé's mental models become evident, and the coach has a chance to correct inaccuracies and to add greater complexity to the protégé's mental models. Moreover, by asking the protégé the questions that the coach ask himself when dealing with a given problem he/she can help the protégé to build better decision-making trees (Lubit, 2001).

Additionally, Erikson (2003) highlights experience as an influential factor in developing entrepreneurial self-efficacy. Erikson further noted that entrepreneurial self-efficacy develops through the journey from being completely inexperienced to becoming completely experienced. MacMillian and McGrath (2000) asserted that entrepreneurial mindset can be developed through experience rather than the traditional method of entrepreneurship education. Harris and Gibson (2008) argued that high involvement in experiential activities can better enable nascent (budding) entrepreneurs or protégés to develop entrepreneurial success. According to Lubit (2001) the opportunity to observe experts work through problems is another way to learn tacit knowledge. The more the expert thinks out loud and permits protégés to see how he analyzes and judges situations, the more tacit knowledge the protégé will absorb. Thinking out loud involves sharing one's perspective and insights, noting what factors (variables) one thinks are most important, and commenting on possible causal relationships between factors. Thinking out loud also includes discussing a variety of possible ways to handle the situation and the pros and cons of each possible course of action. The most educational situation exists when a protégé has an opportunity to try his/her hand at conceptualizing a situation and suggesting a course of action, while under the watchful eyes of an expert who can comment on the protégé's perceptions and decisions. This allows the coach to help the protégé build more useful models of the system. Coaching and mentoring are most effective when experts understood exactly which skills leads to superior performance and can therefore help the protégés to develop those skills.

Social interaction is crucial in the whole process of entrepreneurial learning (Man and Yu, 2007; Pattaway and Cope, 2007). Entrepreneurial learning occurs in a process of personal interaction with the environment (Rae, 2000; 2007; Cope, 2005) aiming at discovering, evaluating and exploiting opportunities (Shook et al., 2003; Corbett, 2005; Heinonen and Poikkijoki, 2006). People often network informally with others with similar interests, or form

communities of practice, to discuss their experiences and gather their own ideas. Communities of practice are groups of people sharing an interest in an issue who meet periodically to discuss problems, brainstorm and share knowledge. Meetings may be in person or virtual. Experts can significantly facilitate the transmission and spread of tacit knowledge by supporting such networks: providing the communication resources needed, allowing people the time to use them, and formally recognizing the community and its contributors. When supported, the communities of people hold considerable potential for developing and spreading the knowledge.

Social interactions shape and develop the entrepreneurial perceptions, attitude and abilities (Rae and Carswell, 2000) of the protégés. Social interactions helps protégés to become aware of their weaknesses, improve their strengths, become mature in networking and communication skills, share and challenge their different insights and reasoning process, discover weak points on their understanding on the basis of others' understanding. More importantly, social interactions help the protégés to apply the acquired knowledge and skills to solve the problems (Fuchs et al., 2008). Working in groups can also present a platform for sharing tacit knowledge. When people work hand-in-hand in teams, they have an opportunity to observe how others conceptualize situations, approach problems, and generate and evaluate solutions. The more people work together, and the more time they spend socializing and casually talking about their experiences, sharing anecdote, and sharing impressions of each others experiences, the more tacit knowledge they will share (Lubit, 2001). Tacit knowledge is converted to new tacit knowledge through socialization (Nonaka et al., 2000).

There is an extra bonus to working in groups. Not only is tacit knowledge shared, but the mixing of tacit knowledge often leads to new insights and innovations. Brainstorming sessions can create considerable intellectual capital because they enable us to integrate and expand our tacit knowledge as we go back and forth in a group, tossing out ideas and impressions. The ideas generally come from intuition, rather than logical processes, and are the progeny of our tacit knowledge (Lubit, 2001). Thus, social interactive learning enhances creativity and innovativeness which are the core components of the whole entrepreneurship process (Rae, 2006; Ko and Butler, 2007). Similarly, spontaneous reactions to the ideas of others also generally reflect our tacit knowledge. Interactive cycle of tossing out possibilities and receiving feedback lead to better and better ideas. As a result of this process of mixing the tacit knowledge of several people, teams are capable of developing more creative solutions to problems than individuals can (Lubit, 2001). Despite the fact that entrepreneurial learning occurs through social interactions rather than through written word of formal instructions (Collins and Robertson, 2003), writing and studying "learning histories" can be a very efficient way to transmit tacit knowledge. Learning histories deal with mistakes which have been made and the logic and assumptions which underlay decisions. Discussing these mistakes helps them to make better decisions (Lubit, 2001).

3. Research Methodology

To examine the relationship between tacit knowledge and entrepreneurship development, survey data were collected from 181 nascent (budding) entrepreneurs or protégés in entrepreneurial learning oriented firms. These firms include trading, fashion/tailoring, auto/electronics, mechanic, upholstery/carpentry and printing/publishing firms located in Makurdi. The survey questionnaire has three sections – respondents demographics, tacit knowledge and entrepreneurship development. Tacit knowledge was measured by 5 items that

were derived from Nonaka et al. (2000) and Lubit (2001) dimensions of tacit knowledge, and Dalkir (2005) properties of tacit knowledge. Entrepreneurship development which has four dimensions (entrepreneurial intention, entrepreneurial networking, entrepreneurial capabilities, entrepreneurial success) was measured using 16 items. These items were adopted from the works of Triandis et al. (1985), Kolbvereid (1996), Fry (2005) and Linan et al (2008). The questionnaire adopted a response set of strongly disagree (1) to strongly agree (5). The collected data were analysed using multiple regression with the aid of SPSS (version 18.0). The reliability analysis revealed that the Cronbach's alpha coefficients of all the constructs surpassed the threshold of 0.70 as suggested by Nunnally and Bernstein (1994), and Neuman (2006).

4. Empirical Results and Discussion

The analysis of the respondents' demographics showed that; 67.8% are male, 32.2% are female, while majority (59.2%) of the respondents had ages that fell within the 18-22 years age group. To examine the relationship between tacit knowledge and the dimensions of entrepreneurship development, a multiple regression analysis was conducted with tacit knowledge as dependent variable and the dimensions of entrepreneurship development (i.e., entrepreneurial intention, entrepreneurial networking, entrepreneurial capabilities, entrepreneurial success) as the predictor or independent variables. The multiple regression model is given as equation (1).

$$TTK = \beta_0 + \beta_1EPI + \beta_2EPN + \beta_3EPC + \beta_4EPS + e \dots\dots\dots (1)$$

Where

- TTK = tacit knowledge
- β_0 = TTK intercept.
- EPI = entrepreneurial intention
- EPN = entrepreneurial networking
- EPC = entrepreneurial capabilities
- EPS = entrepreneurial success
- $\beta_1, \beta_2, \beta_3, \beta_4$ = the regression plane of the independent variables EPI, EPN, EPC and EPS. They estimates the rate of change in TTK for a unit change in EPI, EPN, EPC and EPS

The statistical result of the multiple regression analysis is given in Table 1.

Table 1: Coefficients in the Multiple Regression Analysis of Tacit Knowledge and the Dimensions of Entrepreneurship Development

Predictor variable	B	Std. Error	Beta	t	Sig.
(Constant)	11.281	1.490		5.048	0.000
EPI	1.502	1.087	0.198	4.901	0.042*
EPN	0.946	0.637	0.267	4.047	0.000**
EPC	0.763	0.424	0.382	3.682	0.000**
EPS	0.445	0.089	0.175	2.534	0.000**

* P<0.05; **P<0.01

Dependent variable: Tacit knowledge

Source: Survey data, 2013/SPSS output

The results in Table 1 showed that: entrepreneurial intention (EPI) ($t = 4.901$, $P = 0.042$) is positively and significantly related to tacit knowledge; entrepreneurial networking (EPN) ($t = 4.047$, $P = 0.000$) impacts tacit knowledge positively and significantly; entrepreneurial capabilities (EPC) ($t = 3.682$, $P = 0.000$) contributes positively and significantly to tacit knowledge; and entrepreneurial success (EPS) ($t = 2.534$, $P = 0.000$) has a positive and significant relationship with tacit knowledge.

Entrepreneurship always carries creativity and innovation (Masoud and Elaheh, 2012). Drucker (1985) further noted that creativity and innovation are in need of each other. This explains why there is a long tradition of describing entrepreneurship and innovative business behaviour as an act of creativity. This long tradition of description is premised on the fact that novelty and effectiveness are hallmarks of creative ideas (Amabile, 1996; Ward, 2004). Thus, a nascent (budding) entrepreneur or protégé who wants to actualize an innovative intention, and who is in an entrepreneurial learning oriented firm will experience an enhanced tacit knowledge. More so, a nascent (budding) entrepreneur or protégé with an innovative entrepreneurial intention is consciously or unconsciously driven by this intention to seek informal networks to get information on how to direct his/her intention so as to identify the requisite capabilities, and how to locate the best network provider or expert from whom he/she desires to receive the requisite coaching or mentoring in the chosen vocation. Also, according to Lubit (2001), informal networks or communities of practice are groups of people sharing an interest in an issue, they meet periodically to discuss problems, brainstorm and share knowledge. Thus, as they share their knowledge, experiences and brainstorm, their tacit knowledge is also enhanced. On identifying the expert from whom the nascent (budding) entrepreneur or protégé wants to learn the capabilities, the coaching and mentoring process on the requisite skill begins. As the skills are learnt and practiced repeatedly, the tacit knowledge is enhanced and new knowledge is created.

It has been argued that success in the new economy of rapidly changing environment is based on the development and use of resources that are intangible in nature (Teece, 2000; 2007). In addition, it has been suggested by Prahalad and Hamel (1990) that, in the creation of competitive advantage, the focus of attention has shifted from tangible resources to intangible resources. The main assumption underlying the new economy is that tangible resources can no longer be the basis of competitive advantage because they are subject to imitation. Based on this assumption, the key determinants of a firm's success are referred to as intangible resources (Amit and Schoemaker, 1993; Conner, 2002; 2007). This view strongly parallels a heated and widely debated topic during the 1990s, referred to as the "resource-based view", where scholars within the field of strategic management strongly supported intangible resources (i.e., individual skills or know-how, competencies, capabilities) as the most important source of a firm's success (Wernerfelt, 1984; Barney, 1991; Newbert, 2007; 2008). Consequently, more and better individual know-how acquisition by the nascent (budding) entrepreneur or protégé could translate to higher entrepreneurial success when the nascent (budding) entrepreneur or protégé properly deploys the tacit knowledge in his/her new venture.

5. Conclusion and Recommendations

This study has theoretically linked entrepreneurial learning and individual know-how. Empirically, the results of the multiple regression analysis has shown that the dimensions of

entrepreneurship development are positively and significantly related to tacit knowledge. Thus, in today's technologically driven society and innovation conscious market, efforts should be geared towards tacit knowledge management. This effort should entail using experts or network providers to develop the individual know-how of nascent (budding) entrepreneurs or protégés. This is to ensure that the nascent (budding) entrepreneurs or protégés have well developed tacit knowledge that will translate to innovative products and/or services in their chosen vocations.

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