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Enhancing new venture creation success in South Africa: a project management perspective

Abstract

South Africa's new venture creation rate is disturbingly low. Ineffective management during start-up can lead to a low venture creation rate. Amidst the growing importance of project management in effective business management, utilizing project management in the entrepreneurial process has become very appealing. The purpose of this paper is to provide a project management model for starting a new venture. Desk research is undertaken through which relevant literature on the key components of the study is reviewed and synthesized. The authors find that through action research, project management aspects can be integrated into the entrepreneurial process to improve the new venture success rate. Based on this framework, the authors conclude that it is possible to improve Total Entrepreneurial Activity (TEA) in South Africa and elsewhere. This theoretical framework is yet to be tested. However, even in its present untested form, the paper is important because it theoretically enriches the entrepreneurship literature whilst also offering a possible practical solution to the vexing problem of high new venture creation failure rate in South Africa and elsewhere through a structured framework.

Keywords: entrepreneurship, total entrepreneurial activity, agile project management, new venture creation. **JEL Classification:** M13.

Introduction

Notwithstanding its considerably stable economy relative to other African economies, new venture creation in South Africa is disturbingly low. For example, South Africa's entrepreneurial activity for the years 2008-2009 paints a dim picture: According to FNB and Endeavor South Africa (2010), the Total Entrepreneurial Activity (TEA) index of South Africa stood at 7.8% in 2008, which was lower than that of other emerging economies, such as Colombia (24.5%) and Mexico (13.1%). Following the economic crisis of 2009, the level of the nation's TEA plummeted to just over 5% (FNB and Endeavor South Africa, 2010). Various Global Entrepreneurship Monitor (GEM) reports also show that South Africa's TEA rate in 2011 (9.1%) and in 2010 (8.9%) is far below the average of comparable low- and middle-income economies around the world (Herrington et al., 2009; Herrington et al., 2011). While subsequent years may have posted some positive gains, new venture creation generally remains a grave concern for both academics and policymakers in South Africa.

As in most developing countries that are seeking to address problems of inequality, unemployment and poverty, stimulating entrepreneurship has become the singular, preferred means of solving the problems of glaring income disparities and socio-economic fissures in South Africa, where the country's Gini coefficient (around 57.8) is considered to be among the highest in the world (Bosch et al., 2010). Apart from growing economic, and hence, social inequalities, the call for increased entrepreneurship activity in South Africa has been magnified by the 2009-2010 recession, which was marked by accelerated business closures, resultant job losses and the failure of large companies to create employment (Herrington et al., 2009).

Compounding the inequality problem further, the Entrepreneurial Dialogues (FNB & Endeavor South Africa, 2010) and, more recently, Arko-Achemfuor (2013) highlight entrepreneurship differences within South Africa's major ethnic groups, with Indians and Whites having more entrepreneurs than Blacks and Coloreds. Disparities in entrepreneurial activity transcend race and are also reflected in income levels, according to age. South Africa's rates of TEA in the 18-24 and 25-34-years age brackets were the second lowest of the BRICS economies, which is a cause for concern when one considers South Africa's youth unemployment rate of 48.2% (Herrington et al., 2011).

1. Statement of the research problem

The aforementioned bleak picture of South Africa's entrepreneurial activity draws attention to the need for alternative ways of approaching entrepreneurship development in the country, with the possibility that such a need also exists in similar developing countries. Given that project management is an acknowledged process for achieving organizational goals, and that new venture creation has all the hallmarks of a project, albeit small (Burke, 2007), this paper theorizes that the skillful incorporation of project management techniques into entrepreneurial initiatives can improve the success rate of new ventures.

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Embracing the idea of integrating project management into the entrepreneurial process, Lindgren and Packendorff (2003) proposed that entrepreneurial acts are a temporary series of events with time-limited and team-oriented action, which means that entrepreneurial acts could be analyzed and researched in term of projects. While entrepreneurship literature conceives project management as a necessary skill for successful conception and development of all new business startups (Burke, 2007; Turner et al., 2009; Lindgren & Packendorff, 2011; Ramirez-Portilla, 2013), what remains unknown is how project management can be integrated into the new venture creation process to optimize the chances of success. In this respect, Ramirez-Portilla (2013) highlighted the fact that while entrepreneurs are constantly involved in projects, even if unconsciously, there is a paucity of research that examines the practical overlap of these theoretical constructs. Rico et al. (2011) observed that while entrepreneurial studies explain new venture creation from various theoretical perspectives, "how" to improve the process remains unsolved. They elaborated that, to date, there is no process "road map" that can guide the prospective entrepreneur through the unknown territories of inputs, desired outcomes and associated risks. In view of these gaps and concerns, this study conceives of developing a projectmanagement-based new venture creation process as a necessity.

1.1. Research objectives. Mindful of the above practice and research gaps, this study sought to: (1) identify project management techniques that can be incorporated into the new venture creation process, and (2) generate a pragmatic yet scientific framework for incorporating the two processes of project management and entrepreneurship. In order to attain these objectives a literature review was undertaken.

2. Literature review

For Burke (2006), the setting up of a new venture bears all the characteristics of a project and, thus, requires project management skills. Burke (2006) argued that project management is a core body of knowledge required for new business development.

The process and procedure (the "how") of integrating project management into the entrepreneurial process necessitates a consideration of the different phases and associated activities of the venture creation, as well as an examination of how project management phases fit into them.

2.1. The new venture creation process. Based on the literature, the entrepreneurial (new venture creation) process can be conceptualized as consisting of *idea generation*, *planning*, *resource gathering* and *implementation* stages or phases (Burke, 2006; Kunene, 2008; Deakins & Freel, 2009; Kariv, 2011).

2.1.1. Idea generation. The idea generation stage is where the formulation of ideas, creativity and opportunity identification take center stage (Burke, 2006; Kariv, 2011). Few or no restrictions and no evaluation or criticism may be tolerated since that is counterproductive to the flow of ideas (Allen, 2012). Accordingly, we infer that project management principles may not apply, owing to their rigidity, as opposed to the apparent flexible nature of idea generation. The highly unstructured and "untamed" nature of idea generation, which is marked by trial error, exploration and limited controls, and practically implies that idea generation may not be amenable to integration of the conventionally rigid regime of project management (Coleman, 2014).

2.1.2. Business planning. From a new venture creation perspective, *planning* involves making decisions about which practical activities need to be executed, as well as turning ideas into reality via a business plan. Planning enables the entrepreneur to think through all aspects of the business, resulting in reduced risks associated with the venture (Nieman & Nieuwenhuizen, 2009; Gruber, 2007). Such venture planning closely dovetails with the planning stage in project management. Surprisingly, Karlsson & Honig (2009) reported that business plans are merely symbolic acts often written just to finance a venture. They point out discrepancies that exist between the business plan and the firms' activities over time. To this end, the rigidity of project management can help, requiring that business plans be followed to the letter unless a deviation is absolutely necessary. Such rigid adherence could be critical to overcoming the pitfalls of venture planning, which often takes a symbolic gesture.

2.1.3. Resource gathering. In the resource gathering stage, consideration is given to the main resources of a venture, such as finance, people, equipment and fixed assets. It also relates to exploring how resources can deliver profit to owners and add value to customers. Wickham (2004) argues that successful entrepreneurship requires the special ability to judiciously and appropriately allocate resources that are by nature scarce. By the same token, managing a venture start-up demands that the entrepreneur functions as a project manager, whose success is tied to the ability to acquire adequate resources (Meredith & Mantel, 2012). Resource generation contributes to the success of new venture creation (Chrisman et al., 2005; Deakins & Freel, 2009). Project management competencies, such as accurate resource estimation using standard methods, become vital in resource generation. As Wickham (2004) postulates, resource acquisition appears to be the most challenging at the stage of business inception. As the business grows, this task may become easier, depending on managerial competence (Wickham, 2004).

2.1.4. Business *implementation*. Finally, the *implementation* stage is where the business is formed, and is called "the entrepreneurial event". Using the term *event* alone connotes a project. It is here that the creative idea (Hatten, 2006) becomes a reality through the implementation of business concepts, such as launching new products, introducing new methods of production, opening up new markets, opening new supply sources or industrial reorganization. This stage consummates what Larson and Gray (2011) highlight as the science of project management - a formal, disciplined and purely logical part of the process of project execution. Just as the new venture creation would entail operationalization of the planned activities, the implementation of the new venture from a project management perspective underscores the clear interpretation of project scope statements, as well as the creation of the deliverables and work breakdown structure that facilitates planning and monitoring of the project progress. From a new venture perspective, this stage involves the role of the entrepreneur in dealing with customers, suppliers' cash flow, and other business stakeholders, such as bank managers, investment bankers or other financiers. When the business becomes operational, the project management element, which involves "the application of knowledge, skills and techniques to execute projects effectively and efficiently ... a strategic competency for organizations, enabling them to tie project results to business goals - and, thus, better compete in their markets" (PMI, 2013b), becomes even more indispensable. It is precisely the skill set (project management) that the entrepreneur requires to implement the business idea and minimize the risks associated with implementation. As Larson and Gray (2011) observe, "Project management is no longer a special-need management. It is rapidly becoming a standard way of doing business."

3. Methodology for integrating project management elements into new venture creation

This section outlines the scientific process (methodology) deemed appropriate for the integration of project management elements into a new venture creation process. Mindful of the fact that new ventures come in many forms and, therefore, focus on different industries, it is our considered opinion that action research offers the best scientific solution for integrating aspects of project management into the new venture creation process. As a scientific process, action research can be viewed as a systematic approach that combines action and *reflection* with the intention of improving practice (Cohen, Manion & Morrison, 2011). As Cohen, Manion, and Morrison (2011) point out, action involves some intervention in the research functioning of the real world and a close examination of the effects of such an intervention to aid choicemaking and effectively improve practice. Thus, action research is all about learning from one's own practice in order to improve that practice.

This paper recommends action research in the integration of project management into the venture creation process with the sole purpose of improving the success of new ventures. To provide for varying levels of uncertainty during the new venture creation process as new information is acquired, this study suggests *Canonical Action Research* (CAR) (Susman, 1983) as a research design.

3.1. Overview of CAR. Basically, CAR follows a circular iterative process, starting with diagnosis of the problem, followed by action planning, taking action, evaluating the effect of an action and then specifying the learning that has taken place (Susman, 1983). CAR, therefore, focuses on the generation of new knowledge. Its iterative nature implies a cyclical process (Susman, 1983). For Davison et al. (2004), the cyclical nature of CAR involves a one-directional flow, with *diagnosis* followed by *planning, intervention, evaluation* and *reflection*. Davison et al. (2004) suggested that while the unidirectional flow is desirable, some iteration between stages may be needed. Figure 1 represents the entire CAR framework.

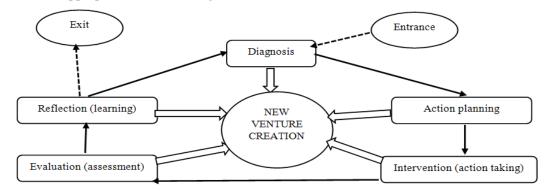


Fig. 1. CAR framework (based on Susman, 1983)

In the context of integrating aspects of project management into the new venture creation process, *diagnosing* is the process of identifying the appropriate project management procedures and possible problems that might occur in their integration into the new venture creation process. The next activity, actionplanning, involves cooperating with the project participants in order to determine the actions that will address the primary problem. These actions will, in turn, be built into the business processes. The following step, namely, intervention or action-taking, involves implementation of the planned changes, as suggested by the participants in the action-planning stage. Upon completing these stages, the participants and researchers collaborate in *evaluating* the outcomes of the applied actions. By iterating through the cycles of activities, researchers can develop an increasingly detailed picture of the problem being addressed, and at the same time move closer to solving the problem (Susman, 1983).

3.2. Integration planning. As stated above, the literature shows that the entrepreneurial process can conveniently be conceptualized as consisting of *idea* generation, planning, resource gathering and implementation (Bang, 1993; Burke, 2006; Kunene, 2008; Deakins & Freel, 2009; Kariv, 2011). In the course of the literature review, it was stated that due to its nature, the idea generation phase does not lend to the rigidities imposed by project management. The integration is accordingly formulated along this conceptualization with the exclusion of the idea generation phase, and designed to match project management elements with the remaining three stages of the entrepreneurial process. Table 1 depicts what we term the action research blueprint, which matches the various elements of project management to the three stages of the entrepreneurial process. In project management parlance, this is called integration planning. The integration planning stage involves the identification of project management principles and techniques that can be incorporated into the new venture creation process, as well as the identification of entrepreneurial activities to which these project management activities and techniques can be tied. Drawing on extant literature (PMI, 2013a; Westland, 2006), the following project management activities and processes have been identified for integration into the new venture creation process, namely, project initiation, project planning, project execution, monitoring and control.

 Table 1. Graphical illustration of the research blueprint (integration planning)

Stage	New venture creation activities	Project management activities
Planning	Business plan:	Project management planning:
	 Marketing planning 	

	 Finance planning Production planning Sales planning Customer strategy Management planning Etc. 	 Selecting project team Project scope definition Project budgeting Quality planning Risk management planning
Resource gathering	Human resources Physical resources Financial resources Physical location	Defining activities Scheduling activities Prioritising activities Scheduling activities Determining resource requirements
Implementation	Registering the business Establish various departments Establish systems, processes & procedures Implement customer & supplier strategies Take first sales/production orders	Systems monitoring & controlling Processes monitoring & controlling Procedures monitoring & controlling Risk management Quality management

3.3. The iteration framework. The framework consists of application of action research to the blueprint shown in Table 1 in order to determine whether the elements are suitable and to identify possible problems associated with the integration. Each stage in the framework is referred to as a cycle. The iteration framework is illustrated in Figure 2 (see Appendix).

3.3.1. CAR cycle 1: New venture planning. Diagnosis - The new venture planning stage consists of planning of both the business and the accompanying business processes required to launch the business Freel. 2009; (Deakins and Nieman and Nieuwenhuizen, 2009; Kariv, 2011). The major activity at this diagnosis stage is to identify which of these planning activities need to be enhanced by which project management activity. Our intuition is that all of the new venture creation planning stage activities would benefit from project management techniques. We specifically identify the work breakdown structure (WBS) analysis. Key project management activities that are essential for proper diagnosis include determining: the scope of activities, activity duration, critical paths, and sequencing of activities. WBS analysis should be carried out so that the scope of activities can be determined. Thereafter, activity durations and the sequence of activities should be identified. The defining project management technique that can be applied here is critical path analysis. As there are a number of interlinking activities in the entrepreneurial process, critical path is fundamental in managing these activities. The critical path enables the venture team to focus attention on activities that could not only delay the venture launch, but cause it to fail. It is important to mention here that while the budgeting of

time for each activity must be done according to project management principles, it is apparent that in financial planning, project management does not really augment what normal financial management already provides.

Action planning – In line with project management procedures, the first step here is to appoint a project team. The team ideally consists of technical staff, administrators, finance experts and the new venture entrepreneur, all of whom are active participants in the new venture creation process. All the team members should meet on a regular basis, depending on the intensity of the current activities.

Action taking – At this stage, the main business planning problems that the team has faced and dealt with undergo scrutiny and rectification.

Evaluating – The main task here is to determine whether the various project management techniques are flexible enough to respond to frequent changes that normally occur in the entrepreneurial process. The result of the evaluation is then reported under lessons learned.

Lessons learned – The main learning experience in integrating project management aspects in the entrepreneurial venture sense is explicated here. This includes learning which project framework is most appropriate in the management of planning activities, which project management tools to use (e.g., Gantt charts would be most appropriate for the venture planning phase), determining critical path(s) and so on. The next section describes Cycle 2.

3.3.2. CAR cycle 2: Resource gathering. Diagnosis – Problem diagnosis at this stage should centre mainly on establishing the resource needs of the envisaged business. Resource gathering involves two main activities as far as new venture creation is concerned. On the one hand, there are all the activities regarding materials procurement, physical facilities as well as the facilities for operating the business. On the other hand, there are the related business activities that involve establishing the technical and humanresource teams, as well as estimating capital and operational costs. The main project management techniques identified to be applicable here are requirements determination and the scheduling of activities.

Action planning – Action planning at the resourcegathering stage involves establishing and coordinating all aspects of the resource-gathering process. Whereas in the planning cycle an overall project plan would be produced, in the resource gathering cycle requirements and activities related to resource gathering need to be carried out. The main project management techniques identified for this cycle are requirements determination and scheduling of activities. Time budgeting for all activities to produce a high-level resource budget is also essential at this stage, as is the gathering of human resources.

Evaluating – This stage involves determining whether the project management tools that were applied are effective in carrying out the resource-gathering process.

Lessons learned – At this stage, lessons learned should focus on determination of financial and nonfinancial requirements. Although it is reasonable to assume that business people will learn from past experiences, lessons learned from the scheduling of activities and time budgeting, etc., will enhance the resource-gathering process to ensure that the right resources in the right quantities are obtained in the future. Therefore, project management techniques related to the scheduling of activities and budgeting are essential requirements for the entrepreneur's resource gathering stage.

3.3.3. CAR cycle 3: Implementation cycle. Diagnosis - At this stage, diagnosis involves determining project execution activities and the project management activities that can enhance the business idea implementation. The launching or implementation of the new venture generally consists of establishing the business entity in its legal form, securing finances, appointing staff, putting up physical structures or leasing premises, setting up the business processes required to start operating and so on. Monitoring and control techniques. as well as scheduling (time management) are possible candidates for integration into the venture establishment phase. However, the full gamut of project management knowledge areas can also be considered necessary to a lesser or depending analysis greater extent, on the requirements of the particular type of business.

Action planning - The action planning should seek agreement on: the physical structures to put up; the business processes, such as functional departments and the preferred information system; the actual numbers of employees required and the applicable remunerations; production capacity; the type of bank account and the company's preferred bankers; and sources, types and amounts of finance required. Following this, contracts need to be signed with suppliers, customers, etc. It is also important at this stage that the business take place within the existing legislation and that the consequence of new legislation be managed when that occurs. All of these implementation plans can be carried out using the project management tools of WBS, which includes activity scheduling, as well as activity and duration estimation.

Action taking – This is where the business idea becomes operational. The first necessary action is to establish the business entity in its legal form. Thereafter, employees need to be appointed, a bank account needs to be opened, finances need to be banked, an information system must be set up and begin running, and raw materials (if applicable) need to be procured. When first orders are taken, production commences. In addition, in this phase, project monitoring and control techniques need to be operational. Monitoring and controlling are the main project management tools to be used at this stage. The scheduling process can be monitored and controlled using agile project management (APM) methods.

Evaluating – At this stage, evaluation involves determining how smoothly the launch of the venture is performing by means of the monitoring and control mechanisms that have been put in place. That is, the evaluation process is measured by how the implementation activities respond to the integration of project management techniques. This involves documenting the implementation results. The results are then listed under lessons learned.

Lessons learned – Because new venture creation occurs in a rapidly changing business environment that is full of uncertainty (Bang, 1993; Burke, 2006; Kunene, 2008; Deakins and Freel, 2009; Kariv, 2011), not all plans may work. Therefore, at this stage, the effectiveness of the basic project management tools in ensuring the smooth new venture implementation should be documented. Secondly, it must be clear that not all of the nine knowledge areas of project management may be applicable at the implementation stage. The information documented here is then fed into the reflection cycle.

3.3.4. CAR cycle 4: Final reflection. This stage requires thorough reflection upon previous cycles.

Planning stage – Planning forms an important part of any entrepreneurial venture and stands at the core of project management. It is a fact that the failure of business plans to cope with rapid fluctuations in the ever-changing business environment (Bang, 1993; Burke, 2006; Kunene, 2008; Deakins and Freel, 2009; Kariv, 2011) is the precise reason why it is necessary to identify the most flexible project management framework, which is able to accommodate flexible business plans. Therefore, the focus here should be on identifying project management activities that are flexible enough to enhance venture planning.

Resource-gathering stage – The resource-gathering stage is very important to a successful business

launch (Chrisman et al., 2005; Deakins & Freel, 2009). At this stage, reflection should focus on how the various stages of the entrepreneurial process can be disaggregated into smaller WBS to allow for effective resource allocation at the activity level. A total system view is required here so the entire project is accorded priority.

Implementation stage – At this stage, a final review is conducted to examine how decisions were made at every previous stage; for example, the impact that the planning and resource-gathering stages had on the successful final starting of the business, as well as the decision-making that went into selecting the final tools for monitoring and control.

Conclusion

Planning stage - Clearly, planning forms an important part of any entrepreneurial venture and stands at the core of project management. The failure of business plans to cope with rapid fluctuations in the ever-changing business environment is the precise reason why it is necessary to use the APM framework, which accommodates flexible business plans. The dependency between activities and their planning was discussed earlier. It is granted that these dependencies can be managed using a Gantt chart or a network diagram. However, a lot of effort goes into maintaining Gantt charts, especially when changes are happening quickly and frequently. In practice, it is much more convenient to use a whiteboard with sticky notes rather than Gantt charts to represent and visualize the activities that have uncertain solutions. In this way, it is simple to move the activities anywhere on the whiteboard and draw connecting lines between the dependent activities. Different colors are used to represent the activities for which teams or individuals are responsible. This technique was adapted from APM and can be refined, depending on the complexity of the new business environment. The WBS is an essential tool in the planning endeavor as it, firstly, enables the team to ensure that all of the activities have been identified, and, secondly, shows which processes have uncertain solutions.

Resource-gathering stage – The resource-gathering cycle can benefit from the WBS since resources can be allocated at the activity level, and activities can be grouped together for control purposes. Costs can also be allocated at the activity level and "rolled up" to the next level; thus, the cost can be determined for a specified group of processes or for the entire project.

Implementation stage – Implementation is about starting the business, as well as monitoring and controlling it. Processes are controlled by monitoring

the progress according to the business plan. The whiteboard and sticky notes can be used effectively in the implementation and control cycles to monitor those processes for which the solution is not well defined, but where the solution can be discovered through the monitoring and control processes. Considerable value can be gained in applying project management techniques to the nine knowledge areas. In particular, risk and quality management highlights the importance and benefits of applying project management techniques in the new venture creation process. A comprehensive risk plan identifies risks early, and risk action plans can, thus, be implemented proactively. It is quite clear that not all of the ten knowledge areas of project management are important in the new venture creation process. In the final analysis, the venture leader and team need to be aware of the most important knowledge areas of project management and when it is profitable to apply them in the new venture process.

It can also be concluded that through action research, project management aspects can be integrated into the entrepreneurial process to improve the start-up success rate. That is, it is possible to improve Total Entrepreneurial Activity (TEA) in countries like South Africa (where start-up failure is high) through the integration of aspects of project management into the new venture process.

Besides enriching the entrepreneurship literature theoretically, the important practical contribution of the paper is that it provides a structured approach/ framework that can be used to enhance new venture creation success in South Africa and elsewhere.

Interested researchers are encouraged to empirically test the framework in the creation of new ventures in various industries and different countries to validate its applicability and to assist in the possible refinement of the framework.

References

- 1. Abrahamse, J. (2008). Towards a framework, through action research, for mobile computing diffusion and adoption within a small-to-medium South African company. Unpublished mastersthesis, University of Pretoria, Gauteng, South Africa.
- 2. Allen, K.R. (2012). Launching New Ventures: An Entrepreneurial Approach, 6th ed., South-Western, Cengage Learning, Mason, OH.
- 3. Arkoh-Achemfuor, A. (2013). *Interaction between Ethnicity and Entrepreneurship in the Naledi Municipality*. Unpublished doctoral dissertation, Central University of Technology, Free State, South Africa.
- Bosch, A., Rossouw, J., Claassens, T. and du Plessis, B. (2010). A second look at measuring inequality in South Africa: a modified Gini coefficient", working paper No. 58, School of Development Studies, Working Paper No. 58, September 2010, pp. 1-16.
- 5. Burke, R. (2006). Entrepreneurs Toolkit, 1st ed., Burke Publishing, Cape Town.
- 6. Burke, R. (2007). Project Management Techniques, Burke Publishing, Cape Town.
- 7. Chrisman, J.J., McMullan, E. and Hall, J. (2005). The influence of guided preparation on the long-term performance of new ventures, *Journal of Business Venturing*, 20 (6), pp. 769-791.
- 8. Coleman, W.J. (2014). *The development and practical implementation of a project management model for enhancing new venture creation success*. Unpublished masters thesis, Central University of Technology, Free State, South Africa.
- 9. Cohen, L. Manion, L. and Morrison, K. (2011). Research Methods in Education, 7th ed., Routledge, New York.
- 10. Davison, R., Martinsons, M.G. and Kock, N. (2004). Principles of canonical action research, *Information Systems Journal*, 14 (1), pp. 65-86.
- 11. Deakins, D. and Freel, M. (2009). Entrepreneurship and Small Firms, 5th ed., McGraw-Hill, London.
- First National Bank (FNB) and Endeavor South Africa. (2010), "The entrepreneurial dialogues: state of entrepreneurship in South Africa", available at: http://www.gibs.co.za/SiteResources/documents/ The%20Entrepreneurial%20Dialogues%20-%20State%20of%20Entrepreneurship%20in%20South%20Africa.pdf (accessed January 21, 2015).
- 13. Gruber, M. (2007). Uncovering the value of planning in new venture creation: a process and contingency perspective, *Journal of Business Venturing*, 22 (6), pp. 782-807.
- 14. Hatten, T.S. (2006). Small Business Management: Entrepreneurship and Beyond, 3rd ed., Houghton Mifflin Company, Boston, MA.
- 15. Herrington, M., Kew, J. and Kew, P. (2009). *Tracking Entrepreneurship in South Africa: A Gem Perspective*, Graduate School of Business, University of Cape Town.
- 16. Herrington, M., Kew, J., Simrie, M. and Turton, N. (2011). *The Global Entrepreneurship Monitor South Africa Report*, The UCT Centre for Innovation and Entrepreneurship, University of Cape Town.
- 17. Kariv, D. (2011). Entrepreneurship: An International Introduction, 1st ed., Routledge, Taylor and Francis, London.
- 18. Karlsson, T. and Honig, B. (2009). Judging a business by its cover: an institutional perspective on new ventures and the business plan, *Journal of Business Venturing*, 24, pp. 27-45.
- 19. Kunene, T.R. (2008). A Critical Analysis of Entrepreneurial and Business Skills in SMEs in the Textile and Clothing Industry in Johannesburg, South Africa, Ph.D. thesis, University of Pretoria, South Africa.

- 20. Larson, E.W. and Gray, C.F. (2011). Project Management: The Managerial Process, 5th ed., McGraw-Hill/Irwin, New York, NY.
- 21. Lindgren, M. and Packendorff, J. (2003). A project-based view of entrepreneurship: towards action orientation, seriality and collectivity, in Steyaert, C. and Hjorth, D. (Eds.), *New Movements in Entrepreneurship*, Edward Elgar, Cheltenham, pp. 86-102.
- 22. Lindgren, M. and Packendorff, J. (2011). On the temporary organizing of entrepreneurial processes: applying a project metaphor to the study of entrepreneurship, *Revue De. Entrepreneuriat*, 10 (2), pp. 45-67.
- 23. Meredith, J.R. and Mantel, S.J. (2012). Project Management: A Managerial Approach, 8th ed., John Wiley & Sons, Singapore.
- 24. Nieman, G.H. and Nieuwenhuizen, C. (2009). Entrepreneurship: A South African Perspective, 2nd ed., Van Schaik, Pretoria, South Africa.
- 25. Project Management Institute (PMI) (2013). A Guide to the Project Management Body of Knowledge, 5th ed., Project Management Institute, Newtown Square, PA.
- Ramirez-Portilla, A. (2013). Project manager's characteristics influence in the entrepreneurial process: a projectbased entrepreneurship model, paper presented at the DRUID Academy, Comwell Rebild Bakker, Rebild/Aalborg, Denmark, 16-18 January 2013.
- 27. Rico, T.H., Dubois, P.M. and Le Coq, M. (2011). A process-based model of new venture creation: toward modelling a practical application of extant theory using SADT diagrams, paper presented at 21st CIRP Design Conference, Daejeon, Republic of Korea, March 2011. Available at: https://hal.inria.fr/file/index/docid/783553/filename/SAM LCPI 032011 HERNANDEZ-RICO.pdf, (accessed 22 February 2015).
- 28. Susman, G.I. (1983). Action research a sociotechnical system perspective, in: Morgan, G. (Ed.), *Beyond Method: Strategies for Social Research*, Sage, London, UK, pp. 95-113.
- 29. Turner, J.R., Ledwith, A. and Kelly, J. (2009). Project management in small to medium-sized enterprises: a comparison between firms by size and industry, *International Journal of Managing Projects in Business*, 2 (2), pp. 282-296.
- 30. Westland, J. (2006). The Project Management Life Cycle: A Complete Step-by-Step Methodology for Initiating, Planning, Executing, and Closing a Project Successfully, 1st ed., Kogan Page, London.
- 31. Wickham, P.A. (2004). Strategic Entrepreneurship, 4th ed., Prentice Hall, Harlow.

Appendix

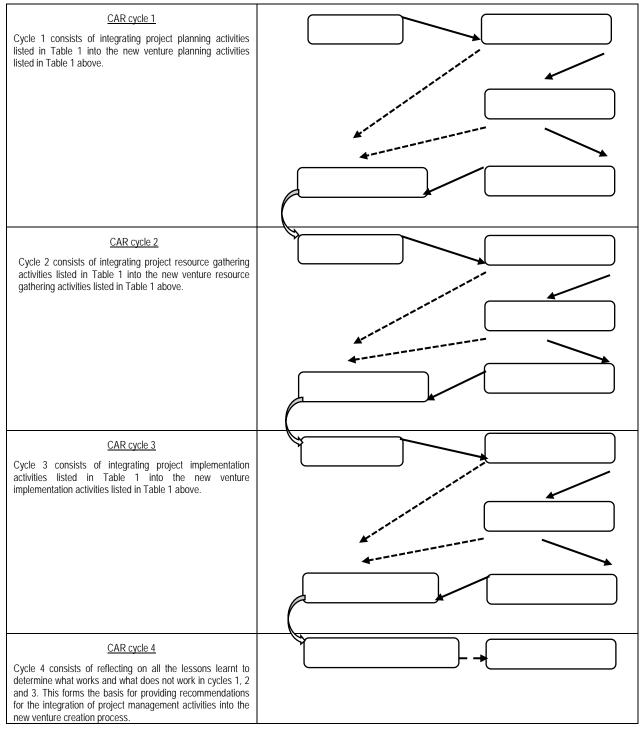


Fig. 2. A graphical illustration of the action research iteration framework (based on Abrahamse, 2008)