

Using Resource-Based Theory to Examine the Competitiveness of an Incubation Plant in Mining and Agriculture.

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Abstract

The development and nurturing of critical resources and competencies that cannot easily be replicated by rivals is a prerequisite for attaining a sustainable advantage in the contemporary, competitive, and volatile, global business landscape. This research used the resource-based view to evaluate the agency's capabilities and diagnose the areas of challenges and the remedial strategies that can be suggested to improve their competitiveness. The study uses a qualitative research method to explore the opinions of 20 sampled participants from the agency's employees on the use of resource-based theory as a strategy for improving their overall capabilities. In the context of research findings, it is argued that to improve the effective use the resource-based theory as a strategy for sustainable competitive advantage, the executives of the agency must: embrace continuous research and innovation, adopt customer centrality to improve the level of focus on the selected market segments, human resource training and development, competitor analysis, and commitment of the executives. Future research can explore the implication of dynamic capabilities on the effective use of the resource-based theory as a strategy for enhancing the attainment of the agency's competitive advantage.

Key Words: Resource-Based Theory, Incubation Plant.

Introduction

In an increasingly competitive business environment, the effective use of resource-based theory is critical for effective market performance of the contemporary businesses (Barney and Hesterly, 2012:19). Resource-based theory enhances analysis and harnessing of a firm's resources to ensure that they are largely inimitable and non-substitutable (Amaral and Parker, 2008:30). Unfortunately, not much evidence suggests the agency's stronger application of resource-based theory to harness existing resources and improve competitiveness derived from the uniqueness and non-substitutability of its resources. This research uses the resource-based view to evaluate the agency's capabilities and diagnose the areas of challenges and remedial strategies that can be suggested to improve the agency's competitiveness.

Background to the Study

Resource-based theory is a strategic management concept that holds that a firm's competitiveness depends on the resources that it has at its disposal (Barney and Hesterly, 2012:19). Resources can be tangible or intangible (Barney and Hesterly, 2012:19). Tangible resources include land, the human resources,

machineries and plants of the enterprise, the distribution networks, proximity of the location to inputs and markets, the computer and IT infrastructure, trucks, vehicles, and raw-materials (Barney and Hesterly, 2012:19). Tangible assets add economic values to the enterprise by facilitating the production and distribution of goods and services in as efficient and cost-effective way as possible (Barney, Ketchen and Wright, 2011:129). Intangible resources connote the non-physical resources or assets that a firm has its disposal (Barney et al. 2011:129). Intangible resources often include intellectual property, goodwill, corporate image, business relationships, strategy, and the skills and expertise of the executives, managers, leaders and the employees (Arnold, Fang and Palmatier, 2011:234). It also encompasses the experience gained by the employees and the enterprise over time, and the inventions of unique cost-effective production methods (Barney et al. 2011:129). Intangible resources are used in conjunction with tangible resources to generate goods and services and enormous business values for an enterprise (Barney et al. 2011:129). The development and nurturing of critical resources and competencies that cannot easily be replicated by rivals is a prerequisite for attaining a sustainable competitive advantage in the contemporary competitive and volatile global business landscape (Arnold, Fang and Palmatier, 2011:234). Unfortunately, the agency's incubation plant still struggles to ensure that most of its value creating resources is not easily replicable by rivals. Besides the similarities and substitutability of the techniques that the agency uses, other limitations are linked to poor sensing and undertaking the necessary reconfigurations to ensure that the designs and capabilities of manufacturing and mining equipment is constantly modified to effectively meet the constantly changing needs of the consumers. The agency is an enterprise that does not only strive to create values for itself, but also for other enterprises. On that basis, the agency is strongly supported by the Department of Agriculture and the Department of Trade and Industry. The agency aspires to be a world-class virtual tooling and design centre, focusing on the front-end engineering for agricultural and mining tooling needs in the SME sector. To achieve this vision, the agency has made it part of its mission to consistently invest in research and innovation and the development and manufacturing of new agricultural equipment and mining tools. The agency's efforts are so far demonstrated in some of the research and innovation projects that include water treatment lime mixer, hydraulic cylinders, mining manufacturing, plastic livestock feeder, animal rehabilitation, and hydroponic growers. The agency conducts integrated training and development with the marketing process as part of the strategies for improving the loyalty of existing customers and attracting new ones. It has also developed significant relationships with the major industry players such as The Council for Scientific and Industrial Research (CSIR) and government departments. Through such networking, the agency aims to perform above its rivals. However, in the wake of the democratic dispensation and economic liberalisation that took place immediately after 1994, the agency, just like any other SME in the manufacturing sector, is increasingly faced with stiff competition from overseas manufacturers. Due to better designs and quality, trends indicate a growing shift of local demand in favour of imported agricultural and mining equipment. So far, this is already causing an impact on the performance and profitability of the agency. Reasons for the declining attractiveness of locally made agricultural and mining equipment is attributable to the limited capacity and skills of the local manufacturers to accomplish the demands of complex, but valuable equipment. The implications of lack of capacity are latent in the fact that although there are some major competitors that are able to design complex equipment. Recently it has emerged that the process of assembling and improving the capabilities of the equipment is done in China, Brazil and India. This equipment is often thereafter imported back to South Africa and sold at higher prices. In other words, the challenges seem to be largely internal, and it is such a view that motivates the application of the resource-based view to evaluate the agency's capabilities, so as to identify the areas of challenges and the remedial strategies that can be suggested to improve their competitiveness.

Research Problem

The inability of the agency to use resource-based theory to innovate and improve its internal capabilities limits the extent to which it is able to thrive and attain a sustainable competitive advantage over its rivals. It also exposes the agency's strategic value creating resources to the risks of imitability and substitutability by

rivals. This is exacerbated by the fact that the agency also faces the challenge of quality and cost control to ensure that the equipment that it manufactures is relatively cheaper and of superior quality compared to those of its rivals. Besides the similarities and substitutability of the techniques that the agency uses, the other limitations are linked to poor sensing and undertaking the necessary reconfigurations to ensure that the designs and capabilities of the manufacturing and mining equipment are constantly modified to effectively meet the constantly changing needs of the consumers. The other challenges that render the agency less competitive among its local and international rivals are not only linked to lack of market knowledge, but also lack of support staff, lack of indemnity insurance, and slow response times of the institutional structures. The effective market performance of the agency is also hindered by the capabilities of certain powerful rivals such as CSIR, as well as its geographical location, technological and equipment risks, lack of adequately qualified engineers, and information data loss.

Research Questions

The research questions for the study are:

- How is the resource-based theory used as a strategy for attaining sustainable competitive advantage by the executives of the agency's incubation plant?
- What are the influencers of effective use of the resource-based theory by the executives of the agency's incubation plant?
- What are the inhibitors of effective use of the resource-based theory as a strategy for enhancing the sustainable competitiveness of the agency's incubation plant?
- What are the appropriate strategies that can be recommended for improving the use of the resource-based theory as a strategy for the agency's sustainable competitive advantage?

Significance of the Research

This research is important because it will enable the management of the agency to review the extent to which their existing resources are capable of inducing the desired level of sustainable competitive advantage. This will enable the identification of the major inhibitors and the appropriate strategies that can be adopted to improve the application of resource-based theory as a strategy for the agency to attain sustainable competitive advantage. Subsequently the study will also lead to the modifications of the existing resource-based theory and the provision of the modified version of how the theory can be practically applied in a contemporary manufacturing setting. Since the application of resource-based theory it is most certain that if the agency adopts the recommendations of this study, it will certainly impact on the improvement of its sustainability. The improvement of the agency's sustainability will certainly provide values to the employees in terms of the improved employee security for the employees. As for the agency's customers, improved internal capabilities will cause significant impacts on better services and quality of products offered. This will certainly lead to the enrichment of existing theories on the application of the resource-based theory, and the extent to which academics will be exposed to a new theory that can be replicated as solutions in a business facing internal capabilities improvement challenges.

Literature Review

Tangible assets add economic value to the enterprise by facilitating the production and distribution of goods and services in as efficient and cost-effective way as possible (Barney, Ketchen and Wright, 2011:129). However, tangible resources are unlikely to influence the improvement of a firm's competitiveness. For tangible resources to enhance the competitiveness of an enterprise, it must be accompanied by the initiatives for ensuring that a firm also has all the essential intangible resources (Barney et al., 2011:129). The neo-classical theories on the resource-based view suggest that intangible resources keep on evolving. Intangible resources often include the intellectual property, goodwill, corporate

image, business relationships, strategy, and the skills and expertise of the executives, managers, leaders and the employees (Arnold, Fang and Palmatier, 2011:234). It also encompasses the experience gained by the employees and the enterprise over time, and the inventions of unique cost-effective production methods (Barney et al. 2011:129). However, Amaral and Parker (2008:30) further divide the concept of a firm's assets into two domains; resources and capabilities. Resources are tradable and non-specific to a firm. That implies that resources can easily be transferred or acquired by another firm. In contrast, a firm's capabilities are non-tradable, specific to a firm and cannot easily be transferred. Capabilities are ingrained in a firm's operational processes and methods. Capabilities are the unique distinctive competencies that a firm acquires over time (Amaral and Parker, 2008:30). The conventional view in the resource-based theory holds that a firm is only able to attain the desired level of competitiveness, if it is able to translate a bundle of these heterogeneous resources into valuable, unique, inimitable and non-substitutable sets of resources (Amaral and Parker, 2008:30). The fundamental view in such reasoning concerns the extent to which a firm is able to enjoy the uniqueness of such resources without exposure to the risks of copying and pasting by rivals influencing the competitiveness of a firm's performance (Armstrong and Shimizu, 2007:959). Competitive advantage refers to the extent to which a firm's value creating strategies are not easily replicated by competitors to erode the business values and advantages that it generates (Armstrong and Shimizu, 2007:959). The sustainability of a firm's competitive advantage therefore depends on its ability to avoid rivals' replication of its most valuable strategies. The purpose of the application of a competitive strategy is to render the competitors' strategies valueless. Hence the sustainability of the competitive advantage is therefore predicted by the continuous failure of the competitors to replicate and erode the competition enhancing strategies (Armstrong and Shimizu, 2007:959). The resource-based theory deviates from fundamental reasoning in industrial organisational economics in that constant analysis of the prevailing environmental trends and response through a combination of critical strategic plans influence the ability of an enterprise to attain a sustained competitive advantage (Armstrong and Shimizu, 2007:959). Instead the proponents of the resource-based theory argue that as strategic planning whether intended or emergent in response to new changes cannot provide sustainable competitive advantage over rivals (Armstrong and Shimizu, 2007:959). Although how a firm applies the uniquely crafted emergent strategies may provide a sustainable competitive advantage, the challenge arises from the fact that the strategic actions of a firm can easily be discerned and copied from the actions of how the firm approaches its market activities. This erodes the competitive advantages associated with a particular strategy. Such a view is strongly echoed in Porter's (1986) four corners of environmental analysis. In a bid to understand the competitors' actions and their future actions and how such future actions can threaten a firm's market performance, Porter's (1986) four corners emphasise the need for firms to evaluate the motives, strategy, assumptions and capabilities of rivals. This signifies that whatever actions firms undertake in the market are often subjected to critical scrutiny by the rivals. In effect, the sustainable competitive advantages resulting from the formulation and application of the strategic plans are often only minimal (Arnold, Fang and Palmatier, 2011:234). Instead, the resource-based theory agitates for the importance of such strategies to be supported by the constant analysis of the internal competencies and capabilities of the firm to use rare, inimitable and non-substitutable resources to enhance its sustainable performance (Amaral and Parker, 2008:30).

Firms' Resources and Sustained Competitive Advantage

The fundamental reasoning in the resource-based view is that a firm is able to attain a sustainable competitive advantage if its value creating strategies are not easily replicable by rivals. To achieve this, the proponents of the resource-based theory argue for the degree of the heterogeneity and immobility of resources (Barney and Hesterly, 2012:19). Firms operating in perfect market competitions that share strongly homogeneous and mobile resources tend to face stiff competition (Amaral and Parker, 2008:30). In such circumstances, no firm is able to attain a sustained competitive advantage over the others because all the unique value creating strategies of the firm can easily be copied by the rest of the firms. However, some of the authors argue that if a firm uses a first-mover advantage, it can be able to gain competitive advantage over other firms (Amaral and Parker, 2008:30). This is attributable to the fact that firms with

deep insight and accurate responses to certain lucrative market trends can be able to conceive and apply certain strategies before the rest of the firms realise the rationale behind the application of such strategies. However, such competitive advantages tend to remain sustainable for as long as the rest of the firms in the industry do not understand the rationale behind its application. It is on that basis unsustainable (Arnold et al. 2011:234). In contemporary competitive business environments, firms use business intelligence and conduct thorough research and information gathering in order to understand the competitors' motives, strategies, assumptions and capabilities (Arnold et al. 2011:234). If a first-mover advantage is able to provide firms with competitive advantages, it can therefore only be temporary (Arnold et al. 2011:234). The other alternative views about the source of competitiveness associated with the use of homogeneous and highly mobile resources highlight that competitive advantage can arise in instances of strict control and barriers to mobility and entry. In such cases, the proponents of such a view argue that firms within the barrier can still continue to enjoy competitive advantage over the firms that cannot enter that particular industry (Barney et al. 2011:129). However, for the firms inside the barrier to operate sustainably and command a maintainable competitive advantage over rivals, they still require heterogamous and immobile resources.

Valuable

Valuable implies that the bundle of the tangible and intangible resources that a firm has at its disposal must enhance its ability to exploit prevailing opportunities and diffuse threats (Armstrong and Shimizu, 2007:959). Through the provision of such consistent results, the resources of an enterprise becomes valuable by enabling the enterprise to attain a sustainable competitive advantage over its rivals. The resources of an enterprise are valuable if it enables them to effectively conceive and apply effectively and efficiently the value creating strategies (Barney and Hesterly, 2012:19). The capability of the bundles of a firm's value resources to enhance the ability of the firm to diffuse threats and exploit the prevailing opportunities edifies the improvement of the performance of an enterprise vis-a-vis that of rivals. However, it is critical that such resources are also rare, inimitable and non-substitutable (Arnold et al. 2011:234).

Rare

A firm is only able to gain a sustainable competitive advantage over rivals if its strategies are rare (Arnold et al. 2011:234). A firm that applies value creating strategies that are equally being conceived and applied by other firms may not attain the desired level of competitive advantage (Arnold et al. 2011:234). To achieve a sustainable competitive, a firm can ensure that its strategies are rare by using a bundle of certain critical resources. Such resources can be human, organisational or physical capital. However, quite often the uniqueness of a firm's value creating strategies depends on its human capital and capital finance (Barney and Hesterly, 2012:19). Human capital associated with the skills, experience and talent of the managers and employees can lead to the accurate reading of trends unfolding in the external environment vis-à-vis the actions of the competitors (Badenhausen, 2012:29). This leads to the formulation and implementation of rare strategies that cannot easily be replicated by rivals. Whereas capital finance is often homogenous and mobile, human experience and talents are not easily replicable (Badenhausen, 2012:29). Enterprises that focus on recruiting and developing more talented employees may therefore tend to gain advantages over rivals through the development and application of rare strategies.

Inimitable

The sustainability of the value creating strategies are influenced by the extent to which rivals operating in the same industry find it perfectly impossible to replicate the unique value creating resources that a firm uses (Armstrong and Shimizu, 2007:959). Neo-classical theories on the resource-based theory indicate that the value creating resources of a firm can be perfectly inimitable under a combination of three factors; the historical trends and idiosyncratic approach undertaken by a firm to success, the ambiguity of the explanation of the link between the resources that a firm possesses and its sustained competitive advantage,

and the socially complex nature of the resources generating a firm's sustainable competitive advantage (Armstrong and Shimizu, 2007:959). Historically, every successful firm has used unique practices and approaches to sail through different periods of turbulence to success. Such unique historical experience provides the firm with an idiosyncratic approach that enables it to define a certain approach of operation, and avoid turbulence and operate more successfully (Auh and Menguc, 2009:757). It influences the development and adoption of certain best practices of operational excellence (Auh and Menguc, 2009:757). In effect, every activity may tend to be done in the way that they are done because of certain historical facts and experience. Such practices and approach based on strong historical facts render it difficult for newly emerging firms to replicate the resources that provide the historical firm with a sustainable competitive advantage (Auh and Menguc, 2009:757). Attempt to imitate the value creating resources will not yield positive results because the firm does not understand the historical experience and approach leading to the adoption of such business approach (Auh and Menguc, 2009:757). The inimitability of a firm's value creating resources is further rendered complex by the ambiguous causal linkage between a coherent set of the value creating resources and a firm's sustained competitive advantage (Badenhausen, 2012:29). If the competitors identify sets of factors or resources that make the firm sustainably competitive, it becomes easier for such rivals to duplicate or replicate such resources (Badenhausen, 2012:29). This leads to the diffusion of the knowledge on how certain resources are being applied throughout the industry. As such diffusion occurs; the values of such competition enhancing resources are therefore enhanced (Barney et al. 2011:129). The secret of such a link can also be destroyed and exposed by hiring some of the key personnel from the firm, so that such personnel can be used to expose what the firms do to achieve the desired sustainable performance. Besides the ambiguous complex social links, the inimitability of a firm's value creating resources is further enhanced by the social complexity of such resources (Badenhausen, 2012: 29). Resources of a socially complex nature often pose difficulties for rivals to understand and imitate (Badenhausen, 2012:29). This arises in instances where the firm is using its relationships with critical suppliers, customers, and other critical stakeholders to enhance the overall competitiveness of an enterprise. Such relationships must only be built on a commercial foundation and social platform (Badenhausen, 2012:29). The other social relationships providing resources that edify a firm's sustained competitiveness is often latent in the relationship between managers and employees and the conduciveness of the work environment (Kraaijenbrink, Spender and Groen, 2009:13). However, the conventional strategic logic on the resource-based theory indicates that as resources become rare, it must also get non-substitutable (Kraaijenbrink et al. 2009:13).

Non-substitutable

If the value creating resources are rare and inimitable, but substitutable, it implies that competitors can use the strategically equivalent resources or similar resources to achieve a sustained competitive advantage in a different way (Kraaijenbrink et al. 2009:13). This erodes the values of a firm's resources that provide sustained competitive advantages over rivals. Non-substitutability implies that the firm takes all the means of ensuring that the resources are non-substitutable (Kraaijenbrink et al. 2009:13). It can also require the use of a rare mix that the competitors that are trying to follow the link cannot easily discern. It may require the use of a combination of factors such as relationships, historical factors, experience, skills and competent managers and good relationship with employees to enable the use of common inputs to produce unique results (Kraaijenbrink et al. 2009:13). Once such resources cannot be easily substituted, then, it provides the firm with sustained competitive advantage over rivals (Kraaijenbrink et al. 2009:13). However, in the increasingly information rich business environment, it is often not easy to ensure that resources can remain sustainably rare, inimitable and non-substitutable (Kraaijenbrink et al. 2009:13).

Limitations: Resource-based Theory as a Determinant for Sustainable Competitive Advantage of the Modern Businesses

Theoretical analysis indicated that the limitations of the resource-based theory as a determinant for sustainable competitive advantage of the modern businesses are often linked to the fact that it tends to be

descriptive rather than prescriptive, and impracticable (Fang, Palmatier and Grewal, 2011:587; Merrilees, Rundle-Thiele and Lye, 2011:368). The details of these limitations are evaluated as follows.

Descriptive rather than Prescriptive

Some of the critics argue that although the resource-based theory elucidates extensively on the requirements for assessing whether the value creating resources of an enterprise provides the ability to an enterprise to attain sustainable competitive advantage, it does not prescribe how such resources can be accumulated (Merrilees et al. 2011:368). The resource-based view lacks the kind of approach in the Porter's (1986) value chain that describes and prescribes extensively how firms can assess the effectiveness of their value chains and eliminate the costly glitches that affect the efficient flow of activities, and the attainment of the desired level of profitability (Merrilees et al. 2011:368). On that basis, it is quite evident from theories that as much as most of the firms may understand that possession of valuable, rare, inimitable and non-substitutable resources enhances the sustainable competitiveness of an enterprise, they are certainly uncertain as to how such resources can be acquired. This limits the practical application of the resource-based view for the reason that how the VRIN resources can be acquired seems more critical as compared to how it must be applied to enable the enterprise attain competitive advantage over rivals (Merrilees et al. 2011:368). However, other authors argue in support of the resource-based theory that the purpose of the resource-based theory was not to describe how firms can develop resources that enhance the attainment of sustainable competitive advantage over rivals, but as to how firms can assess their existing resources in order to make the necessary adjustments and ensure that they become VRIN resources (Hughes, Martin, Morgan and Robson, 2010:5). Most of the authors also argue that despite the criticisms, the resource-based theory still provides an appropriate perspective on how firms can use their resources to attain sustainable competitive advantage over rivals (Hughes et al. 2010:5). As some of the authors emerge in support of the resource-based theory, others still question the logic of infinite effort that the resource-based view requires for firms to attain the desired state of competitiveness (Hughes et al. 2010:5). It agitates for a business approach where firms must continuously strive to excel above rivals in order to perform well and above rivals. To some of the authors, in practical terms, not all firms become competitive because of such approach (Hughes et al. 2010:5).

Impracticable

Other authors point out that the perspectives resource-based theory provides on how to attain sustainable competitive advantage are largely impractical (Jean, Sinkovics and Kim, 2010:63). The view that for a firm to attain sustainable competitive advantage, the resources must be valuable, unique, inimitable and non-substitutable seems not to convince several authors and industry practitioners (Jean et al. 2010:63). From a practical perspective, some of the critics reveal that even in perfect market competition, trends have confirmed that firms can operate sustainably with resources that are largely homogeneous across most of the industry players. In such situations, firms tend to use similar strategies, but because of the numerous consumers, all the firms tend to at least get the market share that they deserve (Jean et al. 2010:63). In a perfect market competition, it is not reasonably possible to use unique resources that cannot be copied by rivals. The improvement in the level of information asymmetry among firms has rendered it possible for firms to understand the industry, markets and the players in such industries and markets (Jean et al. 2010:63). Such a situation leaves no firm with the monopoly over resources that cannot be copied. Although initially the firm can be able to enjoy competitive advantage over rivals, such advantages often don't last before it is copied and pasted or outwitted by new innovations (Jean et al. 2010:63). The attainment of the sustainable competitive advantage keeps shifting for the reason that if it is attainment, other firms keep on copying and eroding the competitive advantages that it provides (Kaleka, 2011:40). This signifies that firms must continue reaching and adopting new approaches for attaining sustainable competitive advantage. The analysis of the resource-based theory suggests that such a fact is missing as instead the resource-based theory espouses VRIN resources as the sources of attaining the sustainable competitive advantage, of which if attained the firms get relaxed (Kaleka, 2011:40). To avoid the

implications of these limitations of the resource-based theory, several authors suggest a combination of different complementary strategies that can be used to enhance effective use of the resource-based theory as a strategy for attaining sustainable competitive advantage.

Strategies for Using Resource-based Theory as a Determinant for Sustainable

Competitive Advantage of the Modern Businesses

Palmatier, Houston, Dant and Grewal (2013:13) and Samaha, Palmatier and Dant (2011:99) share similar views that the critical complementary strategies for using resource-based theory as a determinant for sustainable competitive advantage of the modern businesses often involve the use of the concept of dynamic capabilities, and product and process innovation.

Dynamic Capabilities

The tendency of the resource-based view to assume that the acquisition of the VRIN resources is the end of the process that create the sustainable competitive advantage is addressed in the framework for creating the dynamic capabilities. Dynamic capabilities connotes the strategic innovative initiatives undertaken by the enterprises to revegetate, redefine and renew the organisational effectiveness and enable its overall adaptation to the changes in the external business environment (Palmatier et al. 2013:13). Capabilities are the deeply embedded knowledge and skills exercised through a firm's process and methods to enable the efficient and effective utilisation of its assets to maximise the creation of values for its customers (Palmatier et al. 2013:13). The capabilities of the enterprise are deeply embedded and as thus are not easily transferrable or copied. One of the means of obtaining the capabilities of an enterprise is to acquire the firm.

Building Dynamic Capabilities

Theories indicate that firms aiming to build an enterprise with dynamic capabilities must consider using five main steps; identification of a firm's resources and capabilities, learning, new assets, transformation of the existing assets, co-specialisation, and asset orchestration (Samaha, Palmatier and Dant, 2011:99; Ambrosini and Bowman, 2009:29).

Identification of a firm's resources and capabilities

The identification of a firm's resources and capabilities deal with the analysis of the factors that comprise the critical resources of the firm (Srivastava and Gnyawali, 2011:797). The motives of such analysis are to identify the critical resources and capabilities that must be developed and reconfigured to influence the effective adaptation of the enterprise to new market changes. Just like in the resource-based theory it entails the analysis of the tangible and intangible assets of the firm (Srivastava and Gnyawali, 2011:797). The intangible assets can comprise of factors such as the skills, the experience, knowledge and intellectual property of the innovations and inventions undertaken. It also deals with the assessment and identification of the critical process and methods that have developed over time to define the cost effectiveness and efficiency of the enterprise's operation (Srivastava and Gnyawali, 2011:797).

The tangible resources often include factors such as land, materials, plants and equipment and machineries of the enterprise (Alegheband and Rivard, 2010:19). This must be accompanied by the identification of the core competencies of the enterprise. Core competencies refer to the specific skills and production techniques that have been developed by an enterprise and that distinguish it from the rest of the firms in the market. The other areas of the capabilities for evaluation involve the analysis of the effectiveness of the market and strategic capabilities of the firm (Alegheband and Rivard, 2010:19). That will depend on the

market and competitive strategies that a firm deploys. Their effectiveness will depend on the extent to which the firm is able use such strategies to achieve superior market performance.

Learning

Learning enables the executives of the enterprise to continuously evaluate its internal competencies and capabilities and undertake the necessary changes that enable adaptation to the new changes in the external business environment. Learning involves the radical analysis of the processes, methods and the competitiveness of the resources used the creation of different customer values. This enables the analysis of the value enhancing implications of such processes and the identification of the major inhibitors (Srivastava and Gnyawali, 2011:797). Through such approach the executives are able to continuously apply incremental improvement measures that not only enable the enterprises adapt to the changing environment, but also improve its customer values and values for the shareholders. It is often the concern of the shareholders to for the executives, the application of the learning and improvement concept in the process of building dynamic capabilities is one of the solutions. The learning initiative does require a once-off endeavour to analyse, identify inhibitors and improve, but also to continuously do so.

New Assets

Assets can be financial assets, reputational assets, structural assets, institutional assets, and market assets. New assets' analysis requires the evaluation of the existing assets vis-à-vis the changes that have so taken place in the external business environment so as to identify the new assets that are required. Some of the existing assets may include the tangible and the intangible assets. Intangible assets encompass the intellectual property, unique operational processes only known to the firms, skills, experience, and business relationships with customers, suppliers and the logistics handlers. The intangible assets often encompass the inputs, resources, lands, plants and machineries of the enterprise, and the technology (Alinaghian, Gregory and Srail, 2012:16).

Transformation of the Existing Assets

Replenishment requires the transformation of the existing assets. This may demand significant investments in the improvement and upgrade of the existing technologies, and operational methods and systems (Ambrosini, Bowman and Collier, 2009:12). The other initiatives could entail improvement of the investment in the establishment of new plants. To effectively ensure reconfiguration of the existing assets, the executives can also renew the structure of the enterprise by opening up new structures or creating strategic partnerships to enable faster response to the identified changes in customer needs (Arya, Mittendorf and Yoon, 2013:61). This subsequently leads to the need for co-specialisation.

Co-specialisation

Co-specialisation deals with the process of creating the required synergistic relationships to enable the enterprise more responsive to the changes in the external business environment. It entails the creation of the co-specialisation between sets of related resources such as land, researchers, intellectual property and financial resources (Arya, Mittendorf and Yoon, 2013:61). The other synergy can be created between the researchers, human resources, financial resources and technology. Synergistic relationships contribute enormously to efficiency improvement, the minimisation of costs and the optimisation of the limited resources to enhance the degree of a firm's responsiveness to the changes in the external business environment (Arya, Mittendorf and Yoon, 2013:61). However, co-specialisation not only deals with the creation of a synergy between related resources, but also processes and operational methods and systems across the different departments and the partner institutions (Beske, Land and Seuring, 2014:131).

Asset Orchestration

Asset orchestration is the process of searching, selecting and reconfiguring the existing assets so as to improve the entrepreneurial capabilities of the assets (Beske, Land and Seuring, 2014:131). It deals with sensing the changes in the market and reconfiguring the assets to perfectly deliver on such needs.

A Culture of Product and Process Innovation

Constant innovation enhances a firm's constant introduction of new products and improvement in the quality and attributes of the existing products and services (Stefano, Peteraf and Verona, 2010:87). This reduces the rate of product and service obsolescence, and as thus significantly influences a firm's potential to meet the ever dynamic and complexly changing needs and expectations of the modern customers. The enhanced ability to effectively meet the customers' needs and expectations is associated with the overriding effects on the improvements in customer satisfaction, sales, market share, profitability and significant improvement in the returns on the invested capital (Gosling, Purvis and Naim, 2010:11). Due to these benefits that accrue from innovation, trends indicate that increasingly, a significant number of firms are embracing innovation as one of the key strategies for attaining performance which is relatively superior to the performance of the rivals (Gosling, Purvis and Naim, 2010:11; Liu, 2014:93).

On that basis, a firm's inability to embrace innovation as one of the competitive strategies can significantly undermine its ability to perform at a level that can easily match the performance of its rivals. Yet at the same time, constant innovation not only improves the continuous introduction of new products and modifications in the features and attributes of the existing products and services, but also influences the modifications and improvements in the operational processes and systems that the production of such goods and services undergo (Darkow and Kotzab, 2013:522). In effect, the modifications and improvements in the operational processes can significantly impact on the improvement in a firm's general process efficiency, effectiveness and synchronization on the basis that innovation provides the impetus for the constant review and identifications in the glitches in the existing processes (Darkow and Kotzab, 2013:522). In his theory "Diffusion of Innovation", Rogers (2003) believes that the diffusion of innovation refers to the process that explain how, why and the rate at which new ideas and technology are communicated and spread through the channels and different facets in a social system over time. Rogers (2003) explains that the process of diffusion occurs through the five main steps that include; knowledge, persuasion, decision, implementation and confirmation. In this five steps' process, Rogers (2003) also notes that the process of diffusion is characterized by the five categories of adopters that include; innovators, early adopters, early majority, late majority and laggards. However, above, Rogers (2003) advises that the rate of diffusion is influenced by the factors that include; relative advantage, compatibility, complexity or simplicity, trialability, and observability.

Rogers (2003) interprets that whereas relative advantage refers to the extent at which the adopters assess how improved is the innovation as compared to the previous innovations over the generations; compatibility connotes the evaluation of how the innovation can be effectively integrated into a firm's general operational processes. Rogers (2003) states that complexity or simplicity refers to the assessment of how it is either complex or easier to use a particular technology, as trialability deals with how easy it is to experiment the innovation. Finally, Rogers (2003) reveals that observability concerns the extent at which the use of the innovation is visible across the firms in the industry. Rogers (2003) argues that observability is important on the basis that it influences the rate of the adoption of innovation among firms and industries. Despite pointing out that the process of diffusion or spread of ideas is influenced by the four main factors that include; the rate of innovation, communication channels, time and a social system, Rogers (2003) argues that the entire process of diffusion significantly relies on the human capital. In order for innovation to be self-sustaining, Rogers (2003) construes that it must be widely adopted by the users across a particular system.

Continuous Improvement

A continuous improvement framework that an organisation uses predicts the extent to which it is able to perform more effectively (Lin and Wu, 2014:407; Makkonen et al. 2014:270). Continuous improvement is an iterative cyclical analytical process that edifies identification of major inhibitors and relevant changes and modifications to ensure effective organisational performance. Continuous improvement renders managers more responsive to the increasingly complex and changing demands of the contemporary markets (Salunke, Weerawardena and McColl-Kennedy, 2011:125). Different theories on continuous improvement implies most authors strongly support the articulation in Deming's PDCA theory that effectiveness of continuous improvement is moderated by the application of a four-step's framework encompassing plan-do-check-act (PDCA). Planning requires relevant analysis and outlining critical objectives and activities that must be effectively accomplished to enhance the attainment of such strategic objectives (Salunke, Weerawardena and McColl-Kennedy, 2011:125). It is the planning phase that rationalises how the process of continuous improvement can be undertaken. Critical steps for formulating the continuous improvement plan include situational analysis; the identification of major inhibitors in the internal and external organisational environment, the outline of the critical strategies through which such internal and external inhibitors can be tackled. These steps are followed by doing (Pascucci, Royer and Bijman, 2012:99). Doing is the process of putting into actual practice the adopted remedial and improvement strategies. It also outlines tactics and critical actions outlining roles, responsibilities and duties that managers and employees in different departments and units need to effectively accomplish to edify the implementation of all the critical improvement and remedial measures (Pascucci, Royer and Bijman, 2012:99). The completion of the implementation of relevant remedial and improvement measures leads to checking and studying to assess whether the remedial and improvement measures that have been put in place are contributing towards the attainment of the desired positive effects (Pascucci, Royer and Bijman, 2012:99). Checking requires the use of the appropriate framework for monitoring and evaluation (MandE). Monitoring refers to an ongoing systematic process of assessing the extent to which the process of project implementation is influencing attainment of the desired positive outcomes. Evaluation is a periodic analysis of efficiency, impact, relevance and sustainability of the effectiveness of project implementation (Pavlou and El Sawy, 2011:239). The effectiveness of MandE framework is predicted by the clarity of the outlined quantitative and qualitative indicators, selection of appropriate interface of quantitative and qualitative MandE methods, the application of appropriate quantitative and qualitative techniques for data analysis and interpretation, and identification of inhibitors and intervention strategies that can be undertaken to influence improvement of the organisational performance (Van Weele and Van Raaij, 2014:57; Weerawardena and Mavondo, 2011:220). Depending on the targets and baselines outlined in the continuous improvement plan, indicators are the symbols that must be clearly outlined to highlight the criteria for the assessment of the effectiveness of the process for the implementation of the continuous improvement measures (Teece, 2014:8; Wilden, Gudergan, Nielsen and Lings, 2013:72; Wu, 2010:25). The interpretation of the results of qualitative and quantitative data analysis influences the assessment of the level of progress of the implementation of the continuous improvement measures. It also enhances identification of the causes of failures and the intervention remedial and improvement strategies that can be undertaken (Teece, 2014:8; Wilden, Gudergan, Nielsen and Lings, 2013:72).

Conclusion

Instead of relying on the chances of first-mover advantage or the barrier to industry entry, resource-based theory agitates for firms to continuously improve the degree of resource heterogeneity and immobility. To achieve this, it is critical that the firm nurtures and develops its resources to attain four main attributes; valuable, rare, inimitable and non-substitutable. However, most of the authors have revealed that the effective application of the resource-based theory to enhance the attainment of the desired level of sustainable competitive advantage is still often marred by several limitations. Theoretical analysis indicated that the limitations of the resource-based theory as a determinant for sustainable competitive advantage of the modern businesses are often linked to the fact that it tends to be descriptive rather than prescriptive, and

impracticable. To avoid the implications of these limitations of the resource-based theory, several authors suggest a combination of different complementary strategies that can be used to enhance effective use of the resource-based theory as a strategy for attaining sustainable competitive advantage.

Research Methodology

This research is based on a case study research design. A research design connotes an ontological framework outlining critical methods and techniques that the study applies to research conclusions necessary for addressing the issues raised in the research questions (Greene, 2007: 25). A research design can be exploratory, experimental, case study, descriptive or correlational. A case study research design refers to the research framework that isolates either the geographical areas of the study to specific geographical locations or delineates the population of the study to either a single organisation or just a department. The motive of such approach is usually to enable the understanding of a particular phenomenon in as far as a particular organisation or geographical location is concerned. The application of a case study research design improves the level of focus of the researcher. The motive of a case study is usually to conduct a thorough analysis of the phenomenon of concern in that organisation so that the appropriate remedial measures can be suggested. In organisations with extensive structures and multiple layers, a case study research design is also often used to ease the process of data collection, so that when such data is analysed, the findings can be inferred to apply to the larger organisation. As the research design was built on the anti-positivist research philosophy and the research design was based on a case-study, the research method was qualitative.

Research Philosophy

A research approach is the ontological philosophy that the study uses in the accomplishment of the primary research process (Hewitt, Mitchell and Torgerson, 2008:23). A research approach is also known as the philosophical reasoning or paradigm and logic that guides the process of inquiry to facilitate the accurate response to the research questions and objectives. A research approach can be positivist or anti-positivist in nature (Hewitt et al. 2008:23). The positivist research approach believes in the application of the scientific techniques in the process of data collection, analysis and interpretation in order to reach relevant logical conclusions on the phenomenon being researched (Hewitt et al. 2008:23). The anti-positivist research paradigm does not subscribe to the application of the scientific principles. Instead, it encourages first-hand experience of facts in their natural settings (Hewitt et al. 2008:23). This study applied the anti-positivist research paradigm for the reason that the motive of this research was to examine how resource-based theory can be applied to improve the sustainable competitiveness of the agency's incubation Plant. These are not the types of questions that can be addressed using scientific methods and techniques. In other words, the nature of the study and the research questions dictate the application of the anti-positivist approach as the appropriate research paradigm. In a bid to ensure that the study elicited the relevant information, the study used a case study research design.

Research Strategies

A research method differs from the research design on the basis that whereas a research design outlines the research method and techniques used in the study, the research method illuminates the specific techniques used in the primary research process (Leech and Onwuegbuzie, 2007:265). A research method can be quantitative or qualitative. A quantitative research method is aligned to the positivist research paradigm and applies scientific and statistical techniques such as a Likert numerical scale questionnaire, correlation analysis, factor analysis, descriptive statistics, and other statistical indices as the techniques for data collection and analysis (Leech and Onwuegbuzie, 2007:265). The quantitative research method relies on summarised numerical statistical symbols as the measures for reaching relevant conclusions about the phenomenon being researched. The qualitative research technique on the other hand is aligned to the anti-

positivist research paradigm. The qualitative research methods apply non-scientific techniques such as interviews and focus group discussions to facilitate the in-depth exploring of the perceptions of the participants about a particular phenomenon being researched. The qualitative research method relies on the identification of main-themes and subthemes as the way of discerning the relationships and explanations from the participants about a particular phenomenon being researched. In this research the qualitative research method used. The motive of the application of the qualitative research method is latent in the fact that considering the nature of the research questions, it would facilitate the accurate response to the four fundamental research questions that entailed the evaluation of:

- How effective is the resource-based theory used as a strategy for attaining sustainable competitive advantage by the executives of the agency's incubation plant?
- What are the influencers or determinants of effective use of the resource-based theory by the executives of the agency's incubation plant?
- How effective are the strategies used for improving effective use of the resource-based theory by the executives of the agency's incubation plant?
- What are the appropriate strategies that can be recommended for improving the use of the resource-based theory as a strategy for the agency's sustainable competitive advantage?

Target Population

A target population refers to the units or the subjects that are the focus of the study or the units that are of interest to the research (Morse, 2010:483; O'Cathain, 2009:3). The subjects that were of interest in this research were the 86 employees of the agency. The process for determining the sample to be used in the study was accomplished using purposive sampling (Morse, 2010:483; O'Cathain, 2009:3).

Sampling Strategy

A sample connotes the small units drawn from the larger research population to facilitate ease of data collection, and analysis and interpretation for generalisation to be made about the research population (Clark, 2010:428; Voils and Knafl, 2009:20). Sampling is the process of drawing the required units from the target population for the necessary data to be collected, analysed and interpreted to reach the necessary generalisation about the target population (Morse, 2010:483; O'Cathain, 2009:3). Sampling can be undertaken using either probability or non-probability sampling techniques. Probability sampling entails the use of statistics or science to enhance the selection of the sample units from the target population on the basis of chance. Non-probability sampling uses criteria and techniques other than chance to reach the logical conclusions on the sample units that must be drawn from the target population. The application of the probability sampling often entail the use of any of the techniques that include simple random sampling, systematic sampling and cluster sampling. As the commonly applied non-probability sampling techniques often encompass the application of the stratified sampling, purposive sampling, snowballing and convenience sampling. In this research, purposive sampling was used in the drawing of the required sample units from the target population. Purposive sampling is process through which basing on certain criteria only the units considered to possess appropriate information about the phenomenon being researched are selected from the target population and included in the sample population. Considering that there are about 86 employees of the agency's incubation plant, purposive sampling was used to select only the managers and employees that understand what it requires to apply the resource-based theory as a strategy for attaining sustainable competitive advantage. It was interpreted that the application of purposive sampling was justified on the basis that an attempt to include even the employees who are not knowledgeable on the techniques for improving the agency's internal capabilities would have led to a wastage of time without any relevant and valuable information being elicited from such participants. In effect, the application of purposive sampling by limiting the sampling to the employees that were only considered to be knowledgeable was considered to be critical for edifying the efficiency and effectiveness of this research.

On that basis, twenty (20) participants that are either managers or employees of the agency's incubation plant were selected.

Data Collection Method

Data collection refers to the process of gathering the necessary data and information for relevant analysis to be undertaken and conclusion to be reached on the phenomenon being investigated. The data collection instrument used in a study depends on the nature of the study. In a qualitative research, data collection is often accomplished using structured, semi-structured or unstructured interview questionnaire. In the structured interview questionnaire, the process of data collection is guided and dictated by the pre-determined questionnaires of which deviations are not permitted. Although in semi-structured interviews, the process of data gathering is based on certain pre-set questions, the interviews are still permitted to stray beyond the pre-set questions so as to allow the probing and re-probing to respond to elicit new issues that may not have emerged from the responses of the participants. This research used a semi-structured interview guide.

Data Analysis

The analysis of the collected interview data was accomplished using the thematic content analysis. It entailed the use of three main steps that include; reading and re-reading the interview manuscripts, identification of the main-themes and the sub-themes and explaining the main-themes identified from the interview findings (Clark, 2010:428; Voils and Knafl, 2009:20). This was followed by the analysis and discerning of the relationships between the main themes and sub-themes so as to determine how they accurately respond to the research questions. Since this research was qualitative, the study used credibility, dependability and transferability as the measures for ensuring the validity and reliability of the entire research process (Maruna, 2010:123; Morse, 2010: 483; O'Cathain, 2009:3). This decision was in line with Maxwell's (2012:279) view that in a qualitative research, validity is measured by assessing whether the obtained qualitative data is plausible, credible, and reliable and can be defended when challenged. Maxwell (2012:279) posits that validity and reliability in a qualitative research are debatable. In order to assess validity of a qualitative research, Maxwell (2012:279) outlines that the three types of validity in a qualitative research that must be considered include; descriptive validity, interpretive validity and theoretical validity. All these three kinds of validity were considered in this research on the basis that descriptive validity was infused by ensuring that while the analysis and reporting of the results of interviews were being accomplished, all efforts and measures were put in place to ensure that the end results were the accurate reflections of the views expressed by the participants. The attempt to change or manipulate interpretation and data explanation in anyway was also avoided to enhance the descriptive validity of the study. As much as descriptive validity, interpretive validity and theoretical validity were used for assessing the internal validity of a qualitative research.

Pilot study

A pilot study is a technique which is used to conduct a brief research on about two or three participants in order to not only assess the suitability of the research instrument, but also the feasibility of the study to be conducted. A brief pilot testing was conducted on two participants to check the suitability of the questionnaire.

Ethical Considerations

Ethics are codes of conducts that guide the process and practices of how studies are accomplished (Howe, 2009:428). The four ethical issues considered in this research include; permission to conduct the study, informed consent, confidentiality and anonymity, and ensuring no harm to the participants. In this research, permission to conduct the research has already been sought and approved. Prior to the commencement of

the research, the consent of the purposively selected managers and employees were sought. The potential participants were informed that participation in the study is vulnerability on the basis that even if they have been selected, they were still able to decline or withdraw participation without attracting any retribution. As the participants agreed to participate, they were further informed that any views offered in their responses were confidential and no one else would be privy to such information. Confidentiality and anonymity were further enhanced by avoiding using the names of the participants or any reference to their positions during the discussions of the findings. The research process also ensured that the participants were not exposed to any harm. On completion of data collection, the collected data were stored in safe place in which only the researcher had access to the key. In addition to having no personal details that could identify the respondents, all the returned questionnaires were treated in the strictest of confidence. Questionnaires did not solicit information that could in any way expose or endanger respondents. The respondents were also free to withdraw from the research whenever they felt uncomfortable. The participants were assured of the confidentiality of the study and that respondents have a right not to divulge any information if they felt it would cause them harm or embarrassment or loss of self-esteem. As all these were being accomplished, measures were also undertaken to improve the credibility and dependability of the study.

Credibility

Credibility of the study refers to the trustworthiness of the findings of the study, and dependability connotes the extent to which the findings of the study can be believed and relied on for other logical management decisions (Morse, 2010:483; O'Cathain, 2009:3). In this research, the measures for enhancing the credibility and dependability of the study entailed ensuring that the samples selected from the target population were representative of the target population (Bustamante and Nelson, 2010:56; Maruna, 2010:123). It also required ensuring the extent to which the information gained from the participants about the use of the resource-based theory reflected the common trends about the agency's application of the resource-based theory. To further improve the credibility and dependability of the study, triangulation also had to be used. The first phase of triangulation involved comparing and contrasting the opinions obtained from the participants to assess whether they revealed common themes about the use of the resource-based theory as a strategy for the agency's sustainable competitive advantage.

Limitations of the Study

The major limitations of this study were linked to the lack of previous studies on the use of the resource-based theory on the improvement of the capabilities of an agricultural organisation. However, this study relied on most of the previous studies conducted on the improvement of the internal capabilities of the business enterprises so as to reach logical conclusions about the situation at the agency and the relevant solutions that it can adopt to improve the use of the resource-based theory as one of the strategies for improving its internal capabilities. Studies on resource-based view's application in the other manufacturing sectors were interpreted and triangulated with the interview findings on the agency's application of the resource-based view so as to identify the necessary remedial improvement measures that can be adopted. This contributed towards the reduction of the information gap that previously existed on the applicability of the resource-based theory on the agricultural manufacturing plants. However, since each organisation or business is unique, the conclusions of the agency's application of the resource-based view as well as the suggested model cannot be relied on as the appropriate measure for using the resource-based theory. Instead, companies will have to conduct relevant analysis and undertake the necessary modifications to ensure that the adopted resource-based view model suits their needs.

Results

Of the twenty sampled participants from amongst the employees of the agency, 47% were male and 53% were female. This is largely attributable to the fact that most of the employees at the shop floor level and in

the marketing department are mainly females. Despite the fact that it illustrates the extent to which gender related transformation has been slow, such a fact also implies that the views expressed in this research are not only of the employees from a particular gender group, but from the employees from across of all the categories of employees that the agency employs. Such a view is further accentuated in terms of race, as 29% were Indians and 56% were black Africans, 11% were whites and 14% comprised of the employees from the coloured groups. In regard to the departments, 20% were drawn from the department of research and innovation, 15% from the human resource department, 25% from the marketing department, 15% from the Consulting and Field Management, 12% from the top management, and 13% from the operation management. The employees with work experience of 1-5 years comprised 56% of the 20 sampled those with work experience of 5-10 constituted of 22% and the employees with work experience of 10-15 years constituted of 22% of the sampled respondents. The majority of the employees fell in the categories of the employees with work experience of 1-5 years because the company was only established 15 years ago and only intensified the increment in its recruitment exercise in the last five years. But since, 5 years is reasonably long enough, it can be stated that such employees had sufficient experience to contribute to the analysis of how the resource-based view is used as a predictor of the agency's sustainable competitive advantage. The analysis was further enhanced by the fact that the participants in the interviews were not only drawn from different departments, but also from employees with different educational experience. 33% were holders of the matric certificates, 46% stated that they hold diplomas, 10% had degrees and 11% had postgraduate diplomas.

How is the resource-based theory used as a strategy for attaining sustainable competitive advantage by the executives of the agency's incubation plant?

The thematic analysis of the interview findings revealed that although some of the managers are often unaware, there is a strong use of the resource-based theory by the executives of the agency through the initiatives of creating unique sourcing and business relationships, avoidance of partnerships and strategic alliances, and access of unique technologies from overseas. The intangible assets can comprise of factors such as the skills, the experience, knowledge and intellectual property of the innovations and inventions undertaken. It also deals with the assessment and identification of the critical process and methods that have developed over time to define the cost effectiveness and efficiency of the enterprise's operation (Srivastava and Gnyawali, 2011:797).

Unique Sourcing Relationships

Findings revealed the executives of the agency apply unique sourcing relationships as one of the strategies that can enhance the competencies and resources that cannot easily be copied by rivals. It emerged from the views of participants C and P that the solution of preventing rivals from understanding how the business is sustainably run is to conclude a good contractual relationship with the suppliers. Some of the terms in the customer-supplier relationships have often involved negotiating better prices and preventing the supplier from concluding such contracts with the other businesses. They stated that such approach enhanced the extent to which they are able to command competitive pricings over rivals. In the cases where the maintenance of the equipment is outsourced, participants T and F highlighted similar views that it is critical to negotiate better contractual terms not only for the services rendered, but also for the spare parts supplied. Such a finding implies that a development of good relationships with the maintenance personnel is critical for enhancing the extent to which the agency is able to operate more sustainably as compared to the rest of its competitors. Such findings seem to echo the theoretical findings in which it was noted that in addition to the tangible inputs or assets or resources, business relationships are also often part of the distinctive resources and competencies that render it possible for a firm to attain the desired level of sustainable competitive advantage over rivals (Srivastava and Gnyawali, 2011:797). Through this approach, the participants reiterated that the agency can ensure that whenever funds are lent to them that such funds are paid as soon as possible. By undertaking such an approach, participant M stated that as compared to its rivals, the agency has been able to command sustainable competitive advantages over rivals for the reason

that as some of the businesses spoil that relationships and destroy the sources of capital finances for different business activities, others remain competitive. This implies that as others lack capital to invest in the unique technologies, the agency often has a competitive advantage linked to the fact that they are able to access the necessary financial capital. However, it emerged from the findings that as the agency attempts to use partnerships and strategic alliances to improve the competitive advantage that they have over rivals, some of the participants stated that quite often the agency also tends to avoid strategic alliances and partnerships.

Avoidance of Partnerships and Strategic Alliances

The participants F and G highlighted similar views that the agency tends to work in isolation so as to avoid being caught by the rest of the rivals. They stated that it is often through partnerships that the other businesses are able to gain access to the unique ways that certain businesses are run. This leads to the spilling of the secrets and the erosion of the values of certain unique secrets of running the business. Participants T and N stated that since the agency tends to avoid strategic alliances and partnerships, it tends to command sustainable competitive advantages over the rivals that are not in any form of contractual strategic alliances and partnerships. The businesses that are in contractual strategic alliances and partnerships often face challenges of alliances and partnerships and distort their focus, as the ones that are not in strategic alliances concentrate. Although such a finding contradicts the view in the resource-based theory that hold that business relationships are the sources of a firm's sustainable competitive advantage, it seems the extent to which such business relationships are able to enhance the attainment of a firm's sustainable competitive advantage depends on how it is managed. Nonetheless, some of the participants noted that the agency also uses overseas suppliers to source rare technologies that cannot easily be copied in South Africa.

Access of Unique Technologies from Overseas

Participant D revealed that it is always claimed that most of the local South African businesses do not have sufficient funds. However, it emerged from the interviews that that is not always the case. Some of the participants revealed that the agency has sufficient funds that can enable them copy and paste or even improve the versions of the resources being used by rivals and attain the competitive advantages that far exceed those of the rivals. In effect, the participants reiterated that they often tend to avoid sourcing the required technologies locally. It emerged from the findings, that the use of such technologies enables the agency to gain competitive advantages linked to lower costs and differentiation. As such technological strategies are being applied, some participants also revealed that they tend to constantly improve their operational methods and manufacturing efficiency to improve throughput, drive down costs and provide enormous values to customers. However, from a practical perspective, some of the critics reveal that even in perfect market competition, trends have confirmed that firms can operate sustainably with resources that are largely homogeneous across most of the industry players. In such situations, firms tend to use similar strategies, but because of the numerous consumers, all the firms tend to at least get the market share that they deserve (Jean et al. 2010:63).

What are the Influencers of the Effective use of the Resource-based theory by the Executives of the Agency's Incubation Plant?

The thematic analysis of the interview findings revealed that the major determinants of whether or not the agency is able to effectively use resource-based theory are linked to the extent to which it operates in a niche that renders it not exposed to rivals, knowledge and skills of the rivals to copy and paste value creating strategies, motives of the firm on whether or not to engage in cut-throat competition, and financial resources at the agency's disposal and disposal of the other rival businesses.

Niches

The thematic analysis of the interview findings revealed that the type of market that the business deals in determines whether or not such a business is able to focus on the application of the ideology articulated in the resource-based theory. The theme of a niche emerged from the analysis of the findings. In that regard, most of the participants revealed that because the agency deals in niche areas, they often understand the need for ensuring that their value creating resources are rare, inimitable and non-substitutable. The participants stated that they feel that one can only get concerned about the competitors if they are not operating in a niche market where some of the existing businesses and emerging new businesses do not even think of entering. In other words, it seems due to enormous opportunities in the contemporary South African marketplace that there are certain areas that the existing or the emerging entrepreneurs are not aware. Nevertheless, one of the participants (A) elaborated that niches like the incubation of the agricultural products and development of agricultural equipment that they operate in are usually not of major interests and concerns to other businesses.

Knowledge and Skills

Some of the participants revealed that although the agency operates in highly competitive industries, they often tend to not get bothered about the risks of their value creating resources being duplicated. Participant H linked such approach to the fact that most of the businesses, especially the small and medium size enterprises do not have the essential technical skills and knowledge to enable the copying and pasting of the approach on how incubate agricultural products and equipment. It seems that it is not only the agency's internal capabilities of the firm that render it difficult for most of the firms to engage in the practices that lead to the duplication of its strategic value creating resources, but also the erosion of the competition enhancing advantages of the rivals' firms, but also their understandings of the industry trends. Some of the businesses were found not to be bothered with what is taking place in the external business environment. The participants stated that some of the owners and the executives of certain businesses only become concerned if the sales start falling. Such approach was also found to affect the extent to which they are able to engage in the intelligence gathering and surveillance over rivals to ensure that they follow and attempt to erode the advantages that other firms have invented.

Motives of the Firm

The thematic analysis of the interview findings revealed that the motives of the firm determine the extent to which firms are able to get concerned with the activities of the rival firms. Some of the firms were noted to be largely concerned with the survival and not making enormous profits from the market. Mostly for the small and medium size enterprises, findings revealed that although they could be operating in perfect market competition, some of the firms are usually not interested in engaging in cut-throat competition that involve engaging in activities that undermine the market effectiveness of the rival firms. It emerged from the interview findings that despite the agency's collaborative approach to business operation, there are also instances where they ended up being at loggerheads with the effect that only the ones that are able to stay ahead of rivals in terms of innovations that cannot be copied were able to survive.

Financial Resources

Findings revealed that the agency tends to thrive on the weaknesses of most of its competitors that are usually not well-resourced financially. It emerged from the interview findings that the firms that are able to invent valuable, rare, inimitable and non-substitutable resources are often able to enjoy their competitive advantages for as long as possible. This is attributable to the fact that most of the rival firms that usually aim to copy and paste how such resources are acquired and applied often face the challenge of lack of adequate financial resources.

Participant N stated that most of the businesses that are SAMTI's rivals struggle with the challenge of financial resources. This arises from the fact that most of the businesses are often founded as a result of the funds borrowed from the commercial banks and the development financial institutions such as the Development Bank of Southern Africa. With time, due to poor business skills and financial management, most of the businesses are often unable to repay the borrowed funds, thereby providing the agency with the necessary advantages. This affects the extent to which they are able to obtain the required sufficient capital finance to counter the competitors' activities in the market.

What are the inhibitors of effective use of the resource-based theory as a strategy for enhancing the sustainable competitiveness of the agency's incubation plant?

The thematic analysis of the interview findings indicated that there are often inhibitions undermining the effective use of most of the strategies such as the improvement of the investment in innovation, and human resource training and development to improve effective application of the resource-based theory.

Investment in Innovation

In a bid to improve their competitiveness, findings revealed that most of the executives of the agency have recently considered investing significant capital finance in research and development. They stated that such initiatives have been accompanied by the establishments of the department for research and innovation. In effect, there is a stronger belief among the executives that it is only through research and innovation of new products that they are able to survive in the modern competitive South African business landscape. Although it emerged from the findings that most of the agency's executives are now getting to recognise innovation as the way of differentiating themselves from rivals, high failure rates of new innovations was found to be discouraging.

Most of the new innovations were found to fail either because of lack of resilience, or poor experimentation that lead to the introduction of products into the market when they are not yet ready. The other challenge was found to be linked to poor marketing that affect the publicity of the new products and the extent to which they are able to gain momentum among the consumers. The other challenge is related to lack of skills that are required. In effect, the thematic content analysis of the interview findings revealed that as part of the mechanism for improving effective use of the resource-based theory, most of the executives of the agency have also been investing in the training and development of their human resources.

Investment in Human Resource Training and Development

The participants noted that it is not only the need for increasing investment in innovation which is important for improving competitiveness, but also the investment in the human resource training and development. The participants noted that the effective accomplishment of most of the activities has not been possible.

In effect, there is a commitment among the executives of the agency to improve the skills of the employees. The thematic analysis of the interview findings revealed that the importance of the talented, creative and skilful employees is now emphasised by most of the executives of the agency during the recruitment processes. They stated that this is often accomplished by testing the creativity and problem-solving abilities of the employees. Participant O revealed that such approach differs from the past approaches in which little attention was paid to the degree of the employees' creativity and problem solving ability. The findings also indicated that the other strategies have involved the application of the strategies such as encouraging everyone in the organisation to take further studies in different disciplines.

Conclusions and Recommendations

The use of the resource-based theory used as the agency's strategy for attaining sustainable competitive advantage

The primary findings revealed that although some of the managers are often unaware, there is a strong use of the resource-based theory by the executives of the agency through the initiatives of creating unique sourcing and business relationships, avoidance of partnerships and strategic alliances, and access of unique technologies from overseas. The participants stated that the solution of preventing rivals from understanding how the business is sustainably run is to conclude a good contractual relationship with the suppliers. Some of the terms in the customer-supplier relationships have often involved negotiating better prices and preventing the supplier from concluding such contracts with the other businesses. They stated that such approach enhanced the extent to which they are able to command competitive pricings over rivals. However, it emerged from the findings that as the agency attempts to use partnerships and strategic alliances to improve the competitive advantage that they have over rivals, some of the participants stated that quite often the agency also tends to avoid strategic alliances and partnerships. The participants revealed that the agency tends to work in isolation so as to avoid being caught by the rest of the rivals. They stated that it is often through partnerships that the other businesses are able to gain access to the unique ways that certain businesses are run. This leads to the spilling of the secrets and the erosion of the values of certain unique secrets of running the business. Nonetheless, some of the participants noted that the agency also uses the overseas suppliers to source rare technologies that cannot easily be copied in South Africa. Some of the interviewed participants revealed that it is always claimed that most of the local South African businesses do not have sufficient funds. However, it emerged from the interviews that that is not always the case. Some of the participants revealed that the agency has sufficient funds that can enable them copy and paste or even improve the versions of the resources being used by rivals and attain the competitive advantages that far exceed those of the rivals. In effect, the participants reiterated that they often tend to avoid sourcing the required technologies locally. Instead the stated that they prefer to use overseas' suppliers because it is often not easy for rivals to discern from which part of the globe the machineries were purchased.

Influencers of the Effective use of the Resource-based theory by SAMTI's

The major determinants of whether or not SAMTI is able to effectively use the resource-based theory were found to be linked to the extent to which it operates in a niche that renders it not exposed to rivals, knowledge and skills of the rivals to copy and paste value creating strategies, motives of the firm on whether or not to engage in cut-throat competition, and financial resources at the agency's disposal and the disposal of the other rival businesses. The thematic content analysis of the interview findings revealed that the type of market that the business deals in determines whether or not such a business is able to focus on the application of the ideology articulated in the resource-based theory. The theme of a niche emerged from the analysis of the findings. In that regard, most of the participants revealed that because the agency deals in niche areas, they often understand the need for ensuring that their value creating resources are rare, inimitable and non-substitutable. The participants stated that they feel that one can only get concerned about the competitors if they are not operating in a niche market where some of the existing businesses and emerging new businesses do not even think of entering. In such circumstances, findings suggest that the agency is often never bothered to assess the level or the extent to which their resources are easily vulnerable to copying and pasting by rivals. However, the thematic content analysis indicates that some of the businesses are insulated from the risks of copying and pasting because of the lack of knowledge and skills that some of the businesses have about the business of incubating the agricultural products and development of the agricultural equipment. Most of the businesses were found to mind their own business and only become concerned when the glaring effects become quite evident. Such a finding seems to contradict the fundamental reasoning in the resource-based theory that hold that firms are able to enjoy

sustainable competitive advantage if their resources cannot easily be imitated and copied by rivals. Instead, the findings indicated that it is often not the motive of all the firms in the perfect markets to attack and erode the critical competition enhancing resources of the rival firms.

Inhibitors of effective use of the resource-based theory as the agency's strategy for enhancing its sustainable competitiveness

Primary findings indicated that there are often inhibitions undermining the effective use of most of the strategies such as the improvement of the investment in innovation, and human resource training and development to improve effective application of the resource-based theory. In a bid to improve their competitiveness, findings revealed that most of the executives of the agency have of recent considered investing significant capital finance in research and development. They stated that such initiatives have been accompanied by the establishments of the department for research and innovation. In effect, there is a stronger believe among the executives that it is only through research and innovation of new products that they are able to survive in the modern competitive South African business landscape. Although it emerged from the findings that most of the agency's executives are now getting to recognise innovation as the way of differentiating themselves from rivals, high failure rates of new innovations was found to be discouraging. Most of the new innovations were found to fail either because of lack of resilience, or poor experimentation that lead to the introduction of products into the market when they are not yet ready. The other challenge was found to be linked to poor marketing that affect the publicity of the new products and the extent to which they are able to gain momentum among the consumers. The other challenge is related to lack of skills that are required. In effect, the thematic content analysis of the interview findings revealed that as part of the mechanism for improving effective use of the resource-based theory, most of the executives of the agency have also been investing in the training and development of their human resources. The participants noted that it is not only the need for increasing investment in innovation which is important for improving competitiveness, but also the investment in the human resource training and development. The participants noted that the effective accomplishment of most of the activities has not been possible. In effect, there is a commitment among the executives of the agency to improve the skills of the employees. Although such approach was noted to be critical for dealing with the challenges of lack of skills that still affect most of the businesses, the findings also indicated that such approach has affected the commitment of the employees. This is attributable to the fact that most of the employees have had to balance between work and studies. As the findings revealed, it affects operational efficiency, yet as the efficiency is affected, the rival businesses tend to advantage of such situations. Nevertheless, it is still evident that although most of the executives of the agency are not aware that they are applying the resource-based theory, most of the strategies such as improvement of the investment in innovation and human resource training and development are typical of the approach for enhancing effective application of the resource-based theory. This is further echoed in the fact that the motive of the application of such strategies is often aimed at improving the agency's competitive advantage. That is exactly the motive of the resource-based theory.

Recommendations

Considering the findings of this research, it is recommended that the executives of the agency must consider adopting the following recommendations in order to improve the effective use the resource-based theory as a strategy for sustainable competitive advantage:

Embrace continuous innovation

The executives of the agency must increase investment in the undertaking of relevant research and innovations. Such approach will enable them to constantly introduce new products and improve on the quality of the existing products and services. The improvement in the level of innovation will influence the

extent to which the agency is able to distinguish itself from the other firms. This will influence the sustainability of their competitive advantage. Innovation must not only be directed towards improving the quality of the existing products and services, but also the processes and the operational methods. This will contribute towards the improvement of the level of operational efficiency, cost reduction and differentiation of the enterprise on the basis of the public perception about the operational efficiency that the enterprise espouses. The increment in the level of innovation must be accompanied by the adoption of the concept of customer centricity to improve the level of focus on the selected market segments.

Adopt customer centricity to improve the level of focus on the selected market segments

It is not only the use of the resources that will influence the extent to which the agency is able to attain the desired level of competitiveness, but also the extent to which such resources are used to improve the level of focus on the selected market segment. This is attributable to the fact that in most of the cases the concept of improved level of customer focus is forgotten, as firms focus largely on the product and cost reduction strategies. The agency's adoption of customer centricity can therefore be able to influence the attainment of the desired level of competitiveness as compared to the businesses that do not do so. However, this will require the executives to adopt the measures that influence effective analysis and understanding the needs of the segment to be targeted, and undertaking the necessary product and structural modifications to ensure the accurate response to the needs of such customers. Through such approach the agency will be able to significantly improve the rate of customer attraction, retention and loyalty. As such strategies are being undertaken; the executives of the agency will also need to adopt human resource training and development as the strategy for building the resource base and competencies that can enable the attainment of the desired level of the sustainable competitive advantage.

Human resource training and development

Human resource development will influence the improvement in the level of the skills and creativity of the employees. The extent to which the agency's employees are skilful will enhance the extent to which it can be able to engage in creative activities and innovation as compared to the firms that do not emphasise the need for improving the skills of the employees. The process for developing an effective human resource base will have to start from the recruitment process. The recruitment process will need to focus on the recruitment of the creative employees. Improved level of the employee creativity will impact on the level of the innovation of new products, services and the improvement of the quality of products and the quality of customer services. Through such approach, the agency will be able to develop a pool of human resources which will enable them not only deal with the challenge of lack of skills, but also improve the level of the enterprise innovation (Barney, Ketchen and Wright, 2011:129). As such strategies are being undertaken, the executives of the agency will also have to constantly conduct competitor analysis to assess the extent to which the accumulated resources and competencies are still valuable, unique, inimitable and non-substitutable.

Competitor Analysis

Competitor analysis will aid the agency to drive further innovation. This is attributable to the fact that by competitor analysis, the agency will be able to assess the competitors' actions and the trends in the market and assess whether the resources are still valuable, rare, unique, inimitable and non-substitutable (Arnold, Fang and Palmatier, 2011:234). Even if the agency is taking the critical measures to build its resources and improve the extent to which it is able to attain the desired level of the sustainable competitive advantage, without the evaluation of the competitors' actions, it can turn difficult to assess whether the resources that it is relying on has already been duplicated by another competitor (Arnold, Fang and Palmatier, 2011:234). It also enhances the analysis of whether there are new innovations in the market that threaten the sustainability of the product offerings. This can be accomplished using Porter's (1986) five forces of industry analysis to enable the assessment of the degree of industry rivalry, the threats of new entrants,

threats of substitute products, the buyers' growing bargaining power and the suppliers' growing bargaining power. The other approach that can be used is the Porter's (1986) corners to facilitate the analysis of the likely motives of the competitors, strategy, assumptions and the capabilities of the competitors. In line with the conventional theories on industrial organisational economics, such approach will enable the agency to evaluate the competitiveness of their resources and their competencies so as to evaluate the remedial improvement strategies that can be adopted.

Commitment of the Executives

The commitment of the executives and the owners of the agency will influence the improvement of the amount of resources committed to facilitate the undertaking of the necessary research and innovation (Amaral and Parker, 2008:30). If the executives are not committed or do not understand the value of improving the capabilities and competencies, all the initiatives of building competencies and the required critical resources may not influence the attainment of the sustainable the agency's competitiveness. In this regard, the executives of SAMTI must ensure that irrespective of how impressive the performance of the business, they must still consider taking strategies that ensure that their resources are valuable, rare, inimitable and non-substitutable (Amaral and Parker, 2008:30). Such approach will prevent the performance of the agency from being affected by the future activity of the competitors that may enter the niche where it presently relies on.

Areas for Future Research

It is well confirmed empirically in different studies that the effective use of the resource-based theory influences the improvement of a firm's competitiveness. However, since each business is unique, it is often difficult to discern how the resource-based theory can be effectively used to improve the competitiveness of each business. No single model can be used as an approach that suits the need of every business. Instead, each business must figure out how to effectively use the resource-based theory to develop the competencies and capabilities that impact positively on the improvement of their competitiveness. This implies that as much the evaluation of how the agency uses the resource-based theory has led to the introduction of the notion of the resource based theory as prerequisites for improving the capabilities and competitiveness of the firms involved in the manufacturing of the agricultural equipment, future research can either explore how the application of the resource-based theory can be further entrenched to improve the competitiveness of agri-business, or can explore the implication of dynamic capabilities on the effective use of the resource-based theory as a strategy for enhancing the attainment of the agency's competitive advantage.

Conclusion

The fundament argument of the resource-based theory had been that a firm gains significant improvement in its sustainable competitive advantage if its resources are largely rare, inimitable and non-substitutable. A firm's strategic value creating resources tend to be largely inimitable and non-substitutable if either due to the historical facts and experience or the intricate complex source of a firm's sustainable competitive advantage renders it not easily practicable for rivals to replicate. Although such views were echoed in the interview findings, it was also noted that the major determinants of whether or not the agency is able to effectively use the resource-based theory were found to be linked to the extent to which it operates in a niche that renders it not exposed to rivals, knowledge and skills of the rivals to copy and paste value creating strategies, motives of the firm on whether or not to engage in cut-throat competition, and financial resources at the agency's disposal and the disposal of the other rival businesses. In effect, it is argued that future research can explore the implication of dynamic capabilities on the effective use of the resource-based theory as a strategy for enhancing the attainment of the agency's competitive advantage.

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