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Knowledge Based Management and Innovation: Key Strategic Tools to Unlock Inefficiency and Ineffectiveness in Vehicle Inspectorate Department (VID) - Zimbabwe

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Abstract:
The aim of the research was to evaluate knowledge based management and innovation as key strategic tools to unlock inefficiency and ineffectiveness so as to improve business performance at the Vehicle Inspectorate Department, Zimbabwe. It is widely viewed that knowledge is the only non-replicable resource that still remains unique given that competition can imitate marketing campaigns, pricing and market share.   In this context, understanding the strategic role of knowledge-based management at Vehicle Inspectorate Department (VID) will assist shareholder and stakeholders in establishing its usefulness as a strategic tool for leveraging on competitive advantage in order to improve the bottom line. The reviewed literature provided the platform for identification and analysis into best practices of knowledge management so as to develop a conceptual framework to guide the research. A positivism philosophy approach was adopted so as to answer research questions by unpacking casual relationships between the key variables under study, that is, knowledge management, innovation and business performance. The deductive approach adopted for this research enabled the relationship of these variables to be tested in order to provide factual generalisations to the study. A triangulation of both quantitative and qualitative data collection tools enriched the complementation of results. Findings from the questionnaires administered to customers, policy implementers and users and semi-structured interviews to policy formulators revealed challenges in meeting strategic objectives particularly increasing customer base and revenue given the absence of innovative strategies. The challenges are attributed to resources constraints given that funding by the fiscus is only sufficient to cater for operational costs. The knowledge management strategies can be espoused through employees but there is a challenge of a restrictive knowledge sharing culture that inhibits knowledge creation therefore this has seen knowledge inherent in silos. A correlation co-efficient result of 0.921 suggested a positive relationship between knowledge management and business performance which spells out the potential towards the organisations' growth. However, the absence of a knowledge management strategy makes this a challenge to harness. As a result of the above findings, the researcher recommends the implementation of a knowledge management strategy to espouse innovation complimented by an appropriate electronic knowledge management system to capture and retain knowledge. Knowledge processes of knowledge sharing, creation and retention need to be formulated in policy documents that will be adopted into the mainstream of the business. In conclusion, the integration of the knowledge processes to the organisational strategy will facilitate an endorsement of these knowledge processes as significant towards meeting strategic objectives and growth of the organisation.

Keywords: Knowledge management, innovation, balanced scorecard, competitive advantage, business performance, business strategy

1. Introduction and Background

The aim of the research was to evaluate knowledge based management and innovation as key strategic tools to unlock inefficiency and ineffectiveness so as to improve business performance at the Vehicle Inspectorate Department, Zimbabwe. It is widely viewed that knowledge is the only non-replicable resource that still remains unique given that competition can imitate marketing campaigns, pricing and market share.   In this context, understanding the strategic role of knowledge-based management at Vehicle Inspectorate Department (VID) will assist shareholder and stakeholders in establishing its usefulness as a strategic tool for leveraging on competitive advantage in order to improve the bottom line.

Vehicle Inspectorate Department (VID) is a Government Department under the Ministry of Transport and Infrastructural Development and operates under the auspices of the Public Service Commission (PSC). It is headed by the Director who is underpinned by the Deputy Director and researcher is the Director of VID. The department is in the business of transport and provision of road safety is its main purpose. The operational strategy of the department is articulated by the

twenty-three depots that are located around the country and thus achieving decentralization which is vital in meeting customer needs and achievement of goals. The department is technical and has a technical staff compliment of 310 Vehicle Inspectors/Examiners, 23 Supervisors/Managers and 241 support staff that is clerical, accountants, accounting assistants and general staff.

The major undertakings of VID involves conducting technical inspection of vehicles, the testing of learning drivers for learner licences, the testing of learner drivers for certificate of competency (drivers' licence), weighing all loaded vehicles to detect overloading, inspection of garages for suitability and compliance, ensuring that all foreign heavy vehicles pay road user charges, enforcement of road traffic laws and regulations, collection of levied revenue and assisting Zimbabwe Republic Police (ZRP) as witnesses in court cases involving disputed vehicles inspected by staff. In this thesis the researcher scanned the internal and external environment of VID in order to have an appreciation of factors that may impact on the organisational KM strategy and performance

1.1. Operating Environment

The researcher contends that organisations do not exist in a vacuum and therefore decisions are made within a dynamic and often rapidly changing environment. It is therefore necessary to understand the external and competitive environment that the organisation operates in order to probe the relevant questions that impact on knowledge management strategy and to understand the challenges and implications of the study. To further support this view, Grant (2005:20) suggests that organizations should scan the environment to identify changing trends and patterns, monitor specific trends and patterns, forecast the future direction of these changes, patterns and to assess their organizational impact. The researcher profiled the macro and micro environment.

1.2. The Macro Environment

The macro environment is considered as the highest level of analysis of the key drivers for change and influence to an organisation, Johnson and Scholes (2008:36). In this context, the Political, Economic, Social, Technology and Legislation (PESTL) model was used to outline the external influences that largely affected the organisation as shown in Figure 1
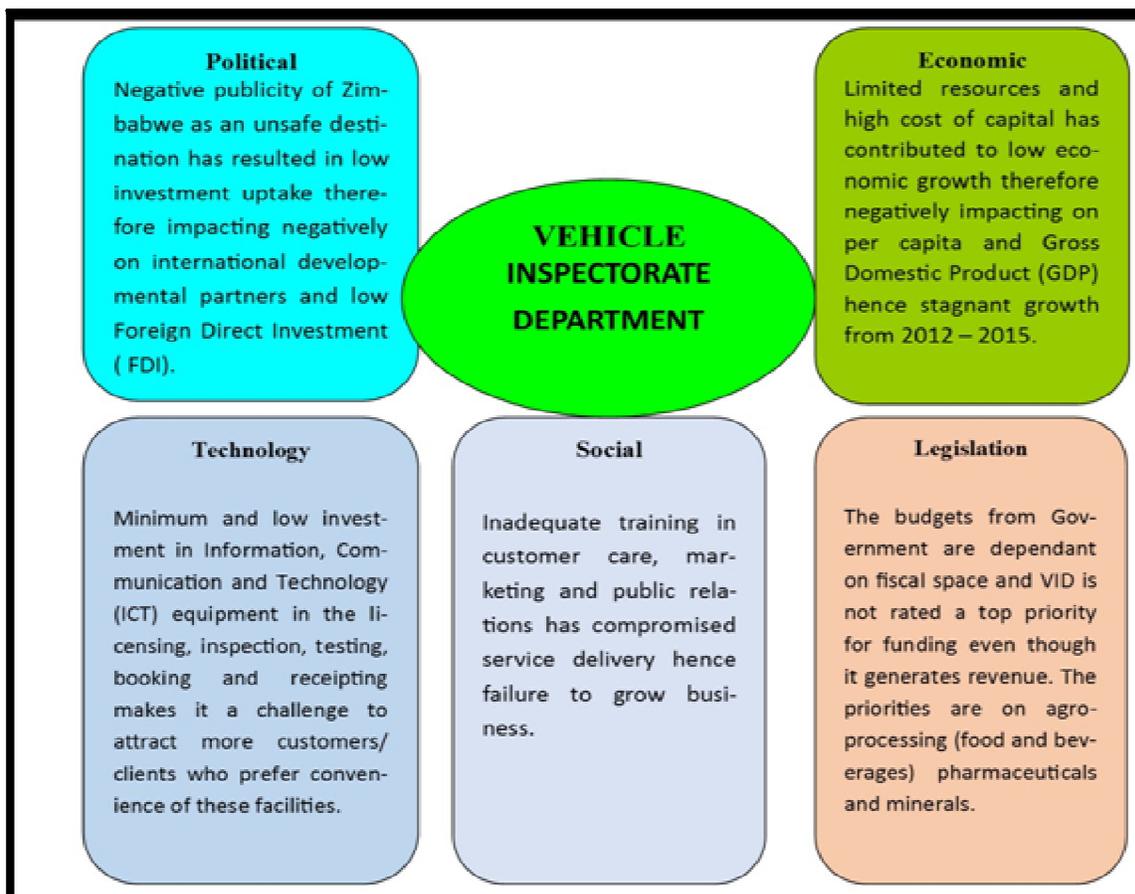

Figure 1: Macro Environmental Analysis of Factors Affecting VID
Source: Author's Own Illustration of PESTL Factors with Elements
Adopted from VID Strategic Review Report (2010 – 2015)

From the above model the Political factors have negative publicity resulting in the organisation constantly reviewing and adopting innovative strategies to attract developmental partners into the country despite these challenges. Economic factors have negatively contributed to the stagnant growth due to high capital costs hence expensive to pursue full decentralisation strategy therefore not able to meet the needs of stakeholders and clients.

In addition, the inadequate investment in ICT has rendered business processes manual and cumbersome therefore inconveniencing clients. This has contributed to revenue leakages as well as low uptake of services. In this context, the adoption of a KM strategy would assist to re-position the organisation towards its thrust of being a leader in the SADC Region. Therefore, the creation of a conducive environment for espousing knowledge management would motivate employees to be innovative, creative and transfer knowledge to the Organisation's knowledge bank or repository hence be able to use it as a competitive advantage. In the same vein, the Legislation should be aligned to meet the needs of clients and stakeholders as well as grow the organisation.

1.2.1. The Micro-Environment

The researcher analysed the key issues of the organisation's capabilities using the Strength, Weakness, Opportunities and Threats (SWOT) as shown in Table 1below. The analysis of the internal environment will assist the organisation to turn its weaknesses into strengths by exploiting opportunities and using KM strategy to improve business performance.

Strengths	Weaknesses
Captive market	Knowledge management
Decentralisation	Inadequate training programmes
Multi-skilled staff	Insufficient financial resources
Teamwork	Lack of trust amongst staff
On-job skills training	Inadequate recapitalisation
	Improper structure/hierarchy
	Poor management skills
	Lack of managerial development
	programmes/ HR development
	Sub-economic tariffs
	Poor rewards and remuneration
	Inadequate employer support
	Lack of e-governance solutions
Opportunities	**Threats**
Innovation	Stakeholder influence
Potential for expansion	External environment
High demand for services	HIV/AIDS pandemic
Commercialization	Lack of incentives
Compulsory inspection of all vehicles	Political interference
Growth in transport businesses	Road carnages
Donor funding	Centralised human resource and
Geographic position (in SADC): transit	Administration structures
Country offers opportunity for investment	Cumbersome procurement procedures
	Bribery/Corruption
	Economic/ (Smart) sanctions
	Inadequate budgetary support
	Inadequate infrastructure and
	Obsolete equipment

Table 1: VID′S Internal Environmental Analysis

1.3. Need and Rationale for the Study

The researcher can draw lessons learnt from business success of large international organisations such as Microsoft, Hewlett Packard, Face-book and others in the developed world who have achieved business success through leveraging on Knowledge Management and innovation for their competitive advantage. VID stand to benefit more from the lessons learnt in an effort to ful fill the organization's vision of "becoming a leader in road safety management in the Southern African Development Community (SADC)".

The mere existence of knowledge somewhere in an organisation is of little benefit, as it becomes a valuable corporate asset only if it is accessible to the employees who need it, for which reason organisations must aim to implement a knowledge management strategy Dalkir, (2005:18). Given the crucial role that KM plays in survival of an organisation in light of

competition, the question still stands as to whether KM and a KM strategy contribute towards business performance. Anumba, (2005:12) argues that Knowledge is an intangible resource and thus measuring its actual contribution still remains a challenge and thus calls for its effective management in order for its benefits to be assessed and appreciated.

Given the views above, the researcher was motivated to embark on this research to explore knowledge management as a possible strategy to meet VID's strategic vision. The vision to be the leading organisation in road safety management within Southern African Development Community (SADC) is determined by how the organisation positions itself in light of dynamic global challenges. In this context, the researcher will profile the background of the organisation in the following text. The researcher is concerned with the stagnant growth of the organisation given that VID is enjoying monopoly in the provision of its products and services driven by its technical and professionally qualified staff compared with similar institutions in South Africa, Namibia, Zambia and others in the Southern African Development Community (SADC) Region. VID's vision is to become a leader in road safety management within SADC. Its key strategic objectives for achieving the vision are:- to reduce road traffic accidents and fatalities by 5% annually, to decentralise to within 40 kilometres radius, to multi–skill 20% of staff annually, to reduce overloading by 10% annually and to increase revenue by 10% annually. To achieve the objectives, VID is aligning itself with the world road safety imperatives with notions such as the global perspective where World Health Organisation (WHO) predicted that by 2020 road traffic accidents will be ranked number one disease burden, taking over from HIV/AIDS which will be ranked at number six therefore called for action.

The researcher noted that in response to the increase in carnage, the United Nations (UN) ACCRA declaration for decade of action (2010-2020) encouraged member states to come up with mitigatory strategies that would reduce road traffic accidents by 50% by 2020. As a result, Zimbabwe set a target in 2010 of reducing crashes and fatalities by 5% annually. These national initiatives need to be supported with knowledge workers who in turn create a knowledge organisation.

<u>1.3.1. Rationale for KM in Today's Business</u>

The major business drivers behind today's increased interest in and application of KM lie in four areas, Dalkir (2005:18):

Globali station of business. Organisations today are more global – multisite, multilingual and multicultural in nature.
Leaner organisations. We are doing more and we are doing it faster, but we also need to work smarter as knowledge workers, adopting an increased pace and workload.

"Corporate amnesia." We are more mobile as a workforce, which creates problems of knowledge continuity for the organisation and places continuous learning demands on the knowledge worker. We no longer expect to spend our entire work life with the same organisation.

Technological advances. We are more connected. Advances in information technology not only have made connectivity ubiquitous but have radically changed expectations. We are expected to be "on" at all times, and the turnaround time in responding is now measured in minutes not weeks.
Thus, it is prudent that organisations develop abilities to create and acquire knowledge, learn, and share what is learnt and put into practice.

1.4. Statement of the Problem

The world is changing at an increasingly rapid rate requiring business organisations to respond effectively to clients' needs and changes in the market place so as to achieve business success. Knowledge Management is central to this and is widely recognised as an integral part of the organisation's strategy to improve business performance, European Management Journal, 34, (2016) 135-144. The focus of the study is on the premise that effective utilisation of Knowledge Management principles and practices at Vehicle Inspectorate may help the organisation improve its business performance and meet its strategic vision of positioning itself to become the leader in road safety management in the Southern African Development Community region by 2020. In this context, the research seeks to "investigate the extent of knowledge management and innovation that could be harnessed to unlock competitive advantage and improve business performance at VID."

1.5. Overview of the Chapters

This thesis is made up of 5 chapters where Chapter 1 was the background to the problem which contextualised the variables surrounding the knowledge systems followed by chapter 2 which gave rise to contemporary studies, rationale trend analysis studies, conceptual and theoretical framework of the thesis. Chapter 3 gave the thesis philosophy and guiding principle using a case studies design while chapter 4 presented the findings from the chosen analysis and data presentation process. Chapter 5 is the last comprising of the thesis summary, research related conclusions, recommendations and recommendations for further studies.

1.6. Title of the Study

Knowledge Based Management and Innovation: Key Strategic Tools to unlock inefficiency and ineffectiveness in Vehicle Inspectorate Department (VID) - Zimbabwe

1.7. Definitions of Special Terms and Expressions

1.7.1. Knowledge Management
Is the process of creating, sharing, using and managing the knowledge and information of an organisation, Journal of applied Knowledge Management, 3 (1), 1-20 (2015).

1.7.2. Innovation
According to Yale University webpage www.http://its.yale.edu accessed on 20 January 2014 defined innovation as the process of implementing new ideas to create value for an organisation.

1.7.3. Balanced Scorecard
Kaplan and Norton (1996:34) considered that the balanced scorecard is a strategic planning and management system that is used extensively in business and industry, government, and nonprofit organisations worldwide to align business activities to the vision and strategy of the organisation, improve internal and external communications, and monitor organisation performance against strategic goals.

1.7.4. Competitive Advantage
Is a function of either providing comparable buyer value more efficiently than competitors (low cost) or performing activities at comparable cost but in unique ways that create more buyer value than competitors and, hence, command a premium price (differentiation), Porter (2008:12).

1.7.5. Business Performance
www.rivalfox.com accessed on 20 January 2014 reminded us that business performance is a combination of management and analytic processes that allows managers of an organisation to achieve pre-determined goals.

1.7.6. Business Strategy
Is a long-term plan of action designed to achieve a particular goal or set of goals and objectives, www.rapid-business-intelligence-success.com accessed on 20 January 2014.

1.8. Research Questions
Fisher (2010:135) reminds us of the importance of defining clear research questions at the beginning of the research process would enable the researcher to draw clear conclusions from collected data that assist in addressing the organisational issues and concerns. In this context, the following questions are necessary to inform the study.
- How does knowledge management create competitive advantage and growth at VID?
- How does innovation create competitive advantage at VID?
- To what extent is knowledge management and innovation applied at VID?
- How can VID improve and sustain competitive advantage through knowledge management and innovation to improve its business performance?
- What are the conclusions and recommendations for achieving growth through KM and innovation at VID?

1.9. The Objectives of the Study
The objectives of the study will aid researcher to be informed of the specific lines that need to be identified and analysed so as to improve business performance at VID.
- To identify how knowledge management can create competitive advantage and growth at VID.
- To examine how innovation can create competitive advantage and growth at VID.
- To evaluate knowledge management and innovation within VID.
- To establish how VID can improve and sustain competitive advantage through knowledge management to improve business performance.
To come up with conclusions and recommendations on how to achieve growth through Knowledge Management and innovation at VID.

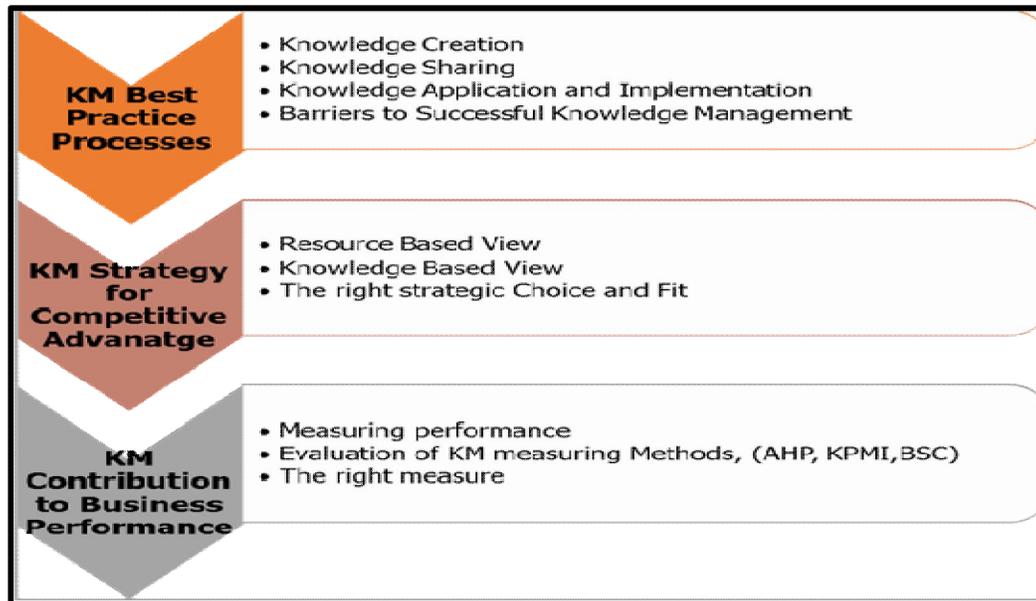*1.10. Variables of the Study*

Figure 2: Variables of the Study

1.10.1. Researcher's Own Illustration

As shown in Figure 2, the key variables of Knowledge Management and business performance as informed by best practices and previous research. Given that the research seeks to evaluate the contribution of knowledge management towards business performance, this relationship will be analysed through the theoretical perspectives and previous researches done in this field. The first stage of the thesis in literature review will discuss and evaluate the Knowledge Management processes in light of how these inform a Knowledge Management strategy as shown through best practices. The second stage is essential in evaluating the various knowledge management strategies that have been proposed by authors so as to identify the best and appropriate approach that can be adopted for VID. This is in line with the main objective of the study which seeks to explore knowledge management and innovation as a strategy to unlock competitive advantage and improve business performance at VID. Like any organisational strategy whose performance is reviewed and evaluated, the same applies to knowledge management to which the final stage of the literature review will discuss this aspect.

1.11. Significance of the Study

The importance of this study is to explore knowledge management and innovation as a business strategy and their impact on the overall performance of VID. The study will equip the researcher with skills of analysing and evaluating the benefits and key drivers of knowledge management as well as strategies for mitigating barriers to knowledge management.
It is the desire of the researcher that the study would enable VID to: -
Identify the knowledge potential within the organisation and leverage on it for service quality, competitive advantage and growth.
Identify strengths and weaknesses of its internal processes and systems to enable VID to build on its strengths and improve on its weaknesses.
Innovate in order to improve quality of service delivery, customer care and business performance.
Manage negative perception and gain lost confidence of the shareholder and members of the public so as to reposition itself through findings and recommendations that the study proffers.
The study will not only benefit VID but also a wider spectrum of constituencies to include the following:-
Shareholder will receive a higher return on investment through improved revenue generated as the organisation grows and from improved business performance as has been widely viewed by corporates and debates.
As the organisation improves its internal systems and processes through innovation, clients will benefit from quality service delivery, customer care, quality products and improved turnaround time.
The industry and relevant stakeholders will benefit from a knowledge organisation through industry surveys and problem needs analysis during the research as well as the recommendations from the study.
Academia will benefit from the study as it adds to the body of knowledge through literature shared on KM and innovation as a strategy to improve business success as well as findings and recommendations put forward for best practice and study will set benchmarks for further research.
The research is also necessary for the nation at large as it provides a platform and space for cultural exchange on management of KM in other countries hence proffers an opportunity to benchmark with best practice globally. By utilising this

pool of knowledge through an efficient and a well-managed system, the organisation seeks to tap into a resource base that could potentially result in improved business performance. Such a strategy of leveraging on KM and innovation can be adopted as a game plan towards improving and sustaining competitive advantage for business to succeed in the global village. It is the researcher's desire that the study might serve as a blue print with the framework that can easily be adopted by organisations with similar challenges on KM issues.

2. Literature Review

The selection of Knowledge Management opinions by the researcher in professional and academic journals, key texts and articles provided insight into aspects of one's research area and objectives relevant to the study. The conceptual framework will be drawn to guide the study using various research works, concepts, theories and current study in order to inform the researcher how knowledge management and innovation as a business strategy can unlock competitive advantage and improve business performance. The key variables under study are Knowledge Management and business performance. Knowledge Management is a concept that has been identified by strategy practitioners such as Meyer and Wit (2012:1550) as a tool to leverage competitive advantage by the only non-replicable resource which is employees' knowledge.

2.1. Conceptual Framework

2.1.1. The Origins and Development of Knowledge Management

Though it had earlier antecedents, the concept of Knowledge Management (KM), as we now know it, evolved as a concept in the late 1980s. The term originated in the consulting community. It arose from the merger of two factors: the recognition of the importance to an organisation of its information and knowledge assets, and from the emergence of the Internet and the almost immediate recognition of the utility of the Internet as an information and knowledge sharing tool, particularly for geographically dispersed organisations.

Km As Information	KM is the concept under which information is turned into actionable knowledge and made available effortlessly in a usable form to the people who can apply it, Wiig (2007:38)
Km As A System	KM is the deliberate and systematic co-ordination of an organisation's people, technology, processes, and organisational structure in order to add value through reuse and innovation. This co-ordination is achieved through creating, sharing and applying knowledge as well as through feeding the valuable lessons learned and best practices into corporate memory in order to foster continued organisational learning, Dalkir (2005:15).
Km As A Process	KM is defined as the process of applying a systematic approach to the capture, structure, management and dissemination of knowledge throughout an organisation in order to work faster, reuse best practices and reduce costly rework from project to project, Nonaka and Takeuchi (1995:23) Pfeiffer and Sutton (2006:21).
Km As An Asset	Knowledge management describes management's efforts to ensure that these assets are continually in motion, being enhanced, shared, sold, or used and that they generate superior business results. An essential characteristic of knowledge is that it only generates value for the firm when it is used effectively in practice. Its value as an asset can be viewed as a capability building and asserts that knowledge has a potential to influence future action. It theorizes that knowledge has the capability to build intangible assets and intellectual capital, Alavi and Leidner (2001:109)
Km As Learning	O'Dell and Grayson (1998:70) argue that the only individuals learn: an organisation is an aggregate of individuals who learn and an organisation's knowledge is an aggregate of the knowledge of the individuals that belong to it.
Km As Innovation	Knowledge management is about supporting innovation, the generation of new ideas and the exploitation of the organisation's thinking power, Adler and Kwon (2002:20).

Table 2: Diverse Definitions of Knowledge Management (KM)
Source: Adopted from Dalkir, (2005:5)

Although there is still a lack of consensus over what constitutes a good definition of KM as shown by the different perspectives in Table 2, there is widespread agreement as to the goals of an organization that undertakes KM. Hansen, (2002: 245) summarizes these goals as follows: "the basic aim of knowledge management is to leverage knowledge to the organization's advantage."

2.1.2. Knowledge Management Conceptual Framework

Fisher (2004:102) posits that theoretical frameworks are necessary in the selection of key theories and concepts that relate and add value to the research. It is in this context that the researcher will use the theoretical framework as a piece of consultancy that will inform research objectives in guiding the researcher to proffer conclusions and recommendations for VID to embrace knowledge management and improve business performance.

The framework shown in Figure 2.21.was adopted for this study because it formed the basis of strategic solutions towards enhanced business performance for VID. A knowledge management framework consists of the principles, concepts and methods of knowing (or heuristics) that define how people think about knowledge. Each organisation will evolve a knowledge framework appropriate to its particular needs, reflecting its distinctive history, industry, and culture. A knowledge framework evolves because people and organisations can absorb new ideas only incrementally, with each new idea building upon those that came before it, Camison and Fores (2010:703).
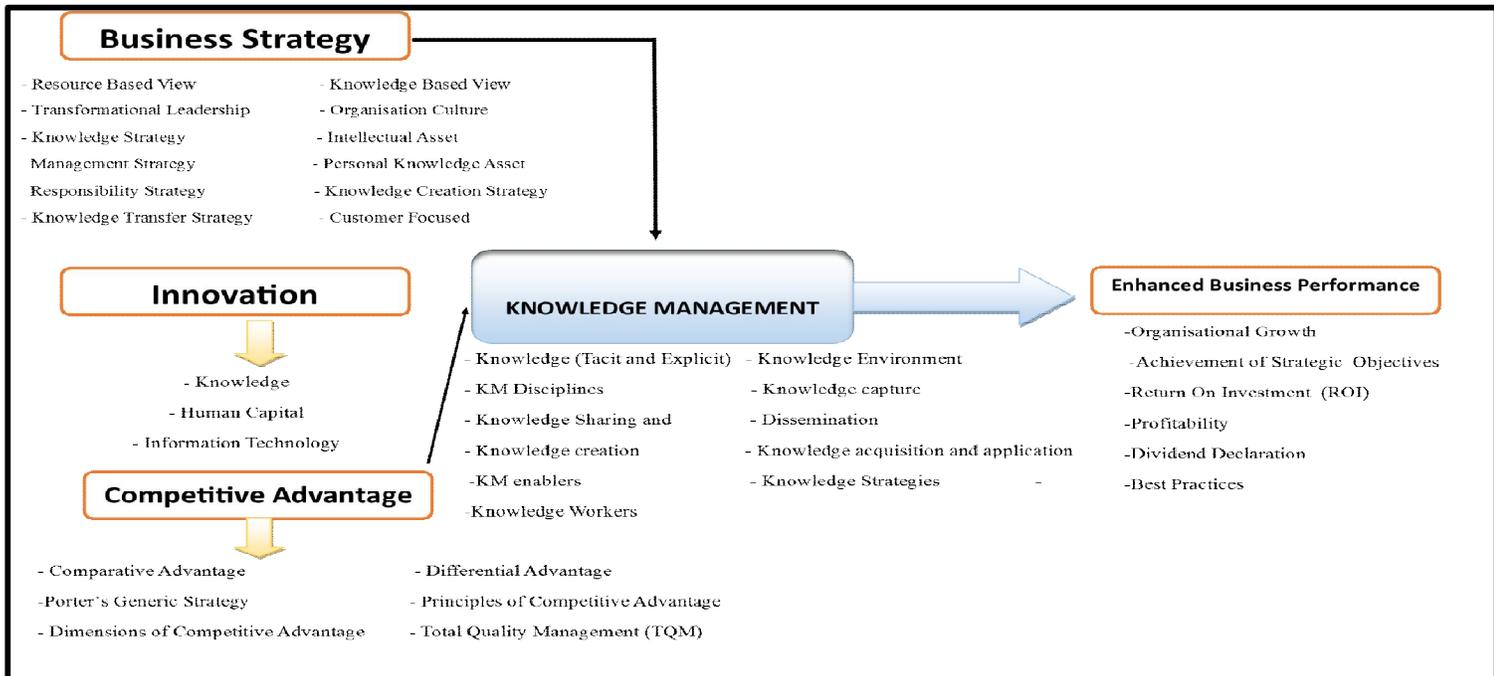

Figure 3: Km Conceptual Framework
Author's Own Framework with Adopted Elements from Callahan (2004:12)

2.1.3. Types of Knowledge

Dalkir (2005:8) stated that there are two types of knowledge i.e. explicit knowledge and tacit knowledge. Both types of knowledge are significant for organizations. In this context, the researcher will highlight in the following text the two types of knowledge as illustrated by Dalkir (2005:8)

COMPARISON OF PROPERTIES OF TACIT VS. EXPLICIT KNOWLEDGE	
Properties of Tacit Knowledge	**Properties of Explicit Knowledge**
Ability to adapt, to deal with new and exceptional situations	Ability to disseminate, to reproduce, to access, and to reapply throughout the organization
Expertise, know-how, know-why, and care-why	Ability to teach, to train
Ability to collaborate, to share a vision, to transmit a culture	Ability to organize, to systematize; to translate a vision into a mission statement, into operational guidelines
Coaching and mentoring to transfer experiential knowledge on a one-to-one, face-to-face basis	Transfer of knowledge via products, services, and documented processes

Figure 4: Comparisons of Properties of Tacit Vs Explicit Knowledge
Source: Adopted from Dalkir, (2005:8)

There is disagreement about the level of analysis at which knowledge is a valid concept, Grant (1996:120) postulates that knowledge exclusively resides in individuals. However, Spender (2005:190) as well as Levitt and March in Kristic, (2007:8) contend that organizations accumulate knowledge beyond that which is embodied in individuals through organizational learning.

2.1.4. Criticism of Knowledge Management

Liebeskind, (1996:100) considered knowledge as disorganized and difficult to manage, multifaceted and complex, being situated and abstract, implicit and explicit, distributed and individual, physical and mental, developing and static, verbal and encoded and by virtue of its very nature it is difficult to manage. Thus the different approaches and solutions used in knowledge management practice cannot provide the expected results for companies as argued by Pfeffer and Sutton (2006:30). According to Thomas et al (2001:870), 40 to 60% of knowledge management projects fail as companies are confronted with problems in practical realisation of knowledge management given the complex nature of knowledge in its form. Day and Wendler, (2013:22) postulate that the application of knowledge management does not lead to success because of the complexity of knowledge management, but the absence of concrete practical advises and especially if the factors of success are not considered. Therefore, success or failure of the use of knowledge management depends on the consideration of the determinants.

Kase et al, (2009:630), postulated that the established approaches and previous analyses about determinants in knowledge management do not sufficiently take the successful use of knowledge management in companies into account, Although few would argue that knowledge is not important, the overriding problem is that few managers and information professionals understand how to manage knowledge in knowledge-creating organizations. The tendency is to focus on "hard" or quantifiable knowledge, and KM is often seen as some sort of information processing machine, Dalkir, (2005:30).

2.1.5. An Integrated KM Cycle

One of the major KM processes aims at identifying and locating knowledge and knowledge sources within the organization. Valuable knowledge is then translated into explicit form, often referred to as *codification of knowledge*, in order to facilitate more widespread dissemination. Networks, practices, and incentives are instituted to facilitate person-to-person knowledge transfer as well as person–knowledge content connections in order to solve problems and make decisions. Once this valuable, field-tested knowledge and know-how is transferred to an organizational knowledge repository, it is said to become part of "corporate memory", Hansen, (2002:236). The processes described above have been articulated in the form of KM cycles by various authors although four major cycles have been presented by the likes of Meyer and Witt (2012:1255), Bukowitz and Pretash (2006:27), and Wiig (2007:8).

A synthesis of these cycles has been developed in the form of an integrated KM cycle that encompasses the capture, creation, codification, sharing, accessing, application, reuse of knowledge within and between organizations that have been discussed by the four major developers of the KM cycles. The KM integrated cycle shown in Figure 5 sets to articulate that effective knowledge management requires an organization to identify, generate, acquire, diffuse and capture the benefits of knowledge that provide a strategic advantage to that organization.

These elements are encompassed in the 3 perspectives in the integrated KM Cycle as shown in **Figure 5.** The cycle indicates that knowledge is always revolving to which these processes are constant but may differ in their use in different sectors, Meyer and Witt, (2012:1256).
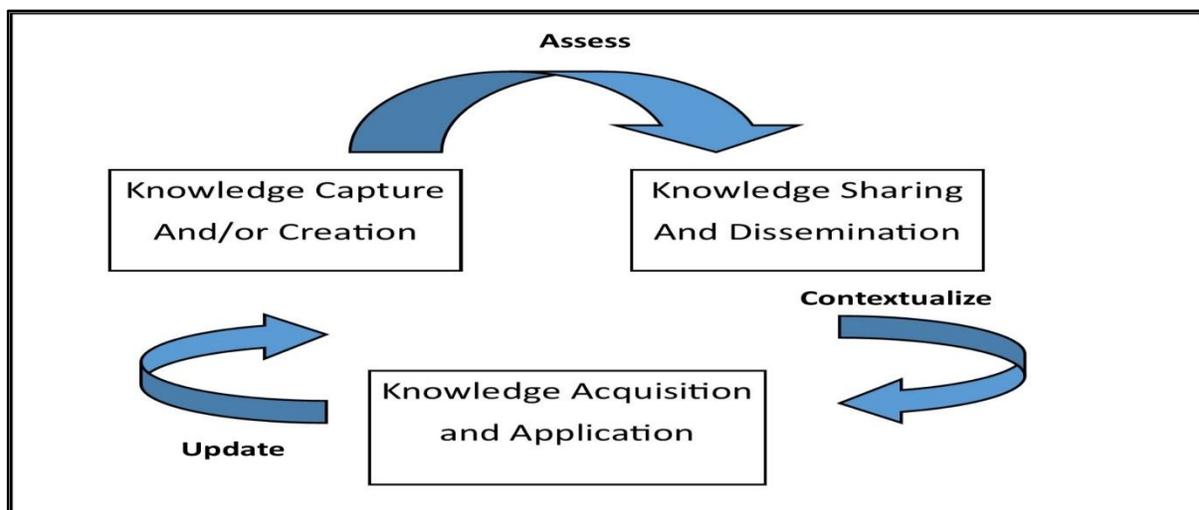

Figure 5: An Integrated KM Cycle
Adopted from Dalkir (2005:43)

Saito et al (2007:99) argues that understanding the different stages of managing knowledge throughout the KM cycle is important as shown in Figure 5, though not enough as these only provide a framework to work in. From a practical perspective, managing knowledge requires an organizing principle—a framework—that will help classify the different types of activities and functions needed to deal with all knowledge-related work within and between organizations. This framework is often encapsulated in the form of a KM theory or model.
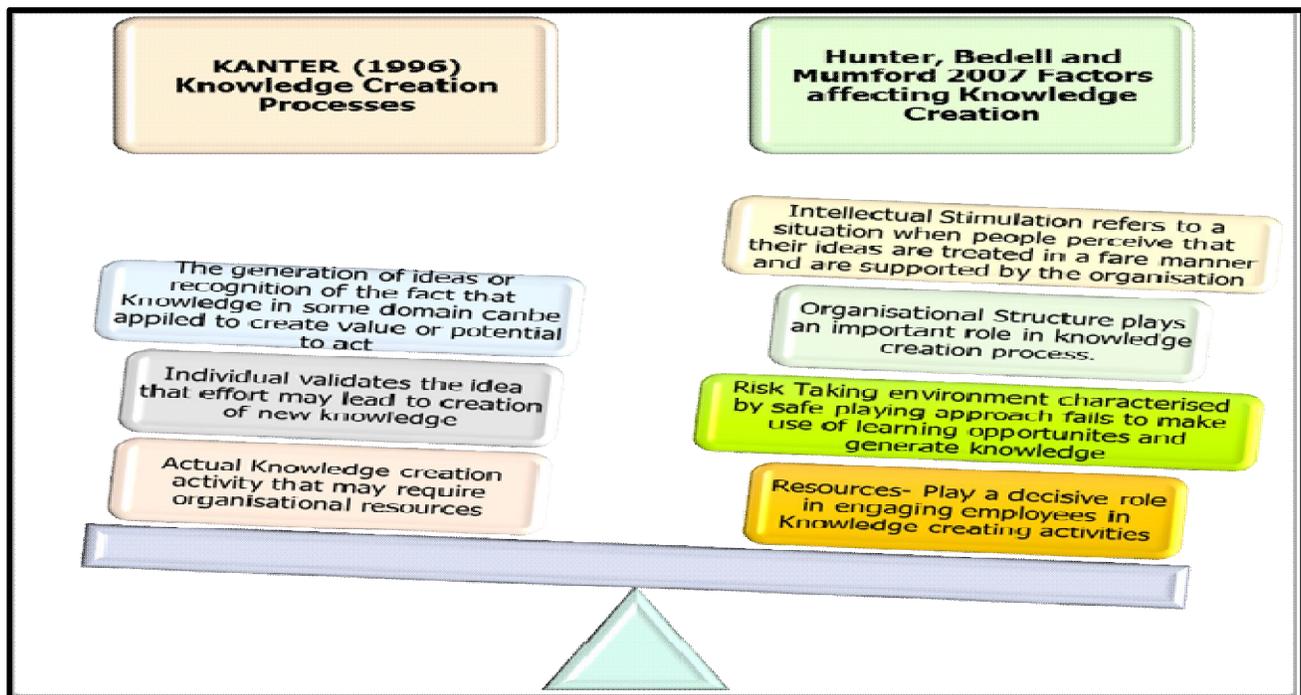

Figure 6: Knowledge Creation A Comparative Process
Source: Adopted From Hunter Et Al (2007:75)

Choo and Weick, (1998:56) Sense-Making KM Model offers a different perspective from that of Hansen (2002:235). Choo and Weick (1998:56) presents that Knowledge creation goes beyond an initiation from an idea and experience, it stipulates one attempts to make sense of the information streaming in from the external environment. Priorities are identified and used to filter the information. Individuals construct common interpretations from the exchange and negotiate information fragments combined with their previous experiences.

2.1.6. Knowledge Sharing

Knowledge sharing is concerned with making knowledge available to other organizational units (groups/teams/individuals) that enable use of knowledge for increasing organizations' potential to act, Kuo and Young (2008:1229). The processes of "moving" existing knowledge around organizations has been labelled in the literature in a variety of ways such as knowledge sharing knowledge exchange, knowledge replication, knowledge assimilation, knowledge integration, knowledge distribution and knowledge transfer, Hansen (2002:236).This approach was further refined by Nonaka et al (2006:1192) to propose a model of knowledge enabling rather than knowledge management. Knowledge enabling refers to the "overall set of organizational activities that positively affect knowledge creation" (Nonaka et al 2006:1192). This typically involves facilitating relationships and conversations as well as sharing local knowledge across an organization and across geographical and cultural borders. In light of Krogh and Roos, (1996:1991)'s view of knowledge sharing, a consensus can be drawn from Nonaka and Takeuchi's, (1995:72) view that Knowledge sharing and use occurs through the "knowledge spiral," which, "starting at the individual level and moving up through expanding communities of interaction, . . . crosses sectional, departmental, divisional and organizational boundaries", this type of knowledge leverages competitive advantage as it cuts across all facets.

2.1.7. Knowledge Search and Transfer Problem

Some organizations are efficient at sharing knowledge across units. Similarly, even inside an organization, some subunits share knowledge more efficiently than others. In addressing the question of efficient knowledge sharing Hansen, (2002:240) posit that when faced with a situation of knowledge search; employees use their acquaintances to search for relevant knowledge. Hansen (2002:242) in his study found that "weak inter unit ties help a search for useful knowledge in other subunits but impede the transfer of complex knowledge" and thus this serves as a barrier to effective knowledge sharing for the benefit of the business.

2.1.8. Knowledge Application- A Contemporary View

It is noted that, no matter how strong the commitment of knowledge workers, research also indicates that Knowledge Management Sharing implementations fail if no training is provided for users Davenport and Prusak (2008:81). Even if knowledge sharing training is provided, Spender and Marr (2005:75) suggests that organisations should spend addition, effort and resources after the knowledge sharing has been fully implemented in teaching, guiding and coaching users on how to use it. Although organisational structures help make organisations more efficient, they have also have the unintended consequence of inhibiting knowledge sharing across intra-organisational boundaries

2.1.9. Barriers To KM Application

There are many general barriers to successful implementation of knowledge management that have been identified, Callahan (2004:89). Understanding what these barriers are, is important in identifying areas of weakness that a knowledge management programme may have upfront. In this way, organisations can cater for these weaknesses and try to build mechanisms to overcome them before implementation.

2.1.10. Organisational Culture

There is so much literature regarding the role of culture in successful Knowledge management, for the purposes of this research the cultural aspect was discussed in terms of its role as a barrier and enabler of successful KM implementation. The organisation's culture can be a huge challenge to any knowledge programme being rolled out. Culture denotes the values, beliefs and norms of an organisation. If the culture is not conducive towards a knowledge management programme, i.e. elements of trust, integrity, reward, recognition, reciprocity, honesty and openness are not visible, it will be very difficult to create a knowledge management culture in the organisation Hue and Wei (2009:830). Most successful organisations adapt their knowledge management culture to fit their organisational culture rather than the other way around Huang (2009:792). It is therefore, vital to define what knowledge management means in a specific organisational context for everyone to share an understanding around the concept and the concept must be clear and understandable by all across organisationalboundaries. It must be documented and ratified.

2.1.11. Leadership

There are as many leadership styles as there are leaders, Smit and Cronje (1996:25). In contrast, Williams (1999:55) argues that there is no one right way to lead or manage that fits all situations. However, Kao (2001:18) posit that most successful innovative and knowledge management organisations are driven by transformational leaders

2.1.12. Change Management

Organisational learning is a transformational process which seeks to help organisations develop and use knowledge to change and improve themselves on an ongoing basis, Brown (1994:2). Change is defined by Burns (2004:467) as "a one-off event, an expectation to the normal running of an organisation and therefore something to be dealt on an issue-by-issue basis as it arises". On the other hand, Senge (1990:18) considers that change can either be planned or emergent. Planned change is deliberate and well thought out whilst emergent change is spontaneous and unplanned. However, Mahoney, (2000:242) argues that even the most carefully planned and implemented change programme will have some emergent impacts. In addition, Weber (2007:341) posits that although organisations have to undergo continual change, it does not necessarily mean that the people involved enjoy the change process or the experience involved, some may resist the change. The success of a change process hinges on the way it is conducted.

2.1.13. Knowledge Management as a Strategy for Business Performance

The term 'knowledge strategy' first appeared in the management literature in the late 1990s in response to the observation that initiatives in knowledge management were rarely linked with initiatives in business strategy Zack, (2009:125). The distinction between 'knowledge strategy' and 'knowledge-management strategy' is unnecessary because, in practical terms, it is difficult to separate the act of identifying important knowledge and the act of implementing knowledge initiatives to close knowledge gaps as suggested by Manasco (2009:2).

Observations by knowledge management practitioners show that organisations are living organisms that must constantly adapt to their environment. This means that the KM strategy identified as appropriate at one moment in time will need to change as knowledge moves through the organisational learning cycle to a new phase, Manasco (2009:2). The rate at which this cycle operates will vary from one sector to another, additionally, KM strategies are based on different approaches such as the type of knowledge (explicit and implicit), type of business strategy, organization process, or a combination of these but no one considered Organization Life Cycle (OLC) for choosing KM strategies.

2.1.14. Resource Based View (RBV) and Knowledge Based View (KBV) of KM Strategy

Resource-based view suggests that having unique access to valuable resources is one way to create competitive advantage. However, Kase et al (2009:620) argue that not all organizations are so privileged, most competing organizations

hire from the same labour pools, use similar raw materials, have access to the same information technology, energy resources, plant, equipment, and other traditional   resources.

Whilst resources play a critical role in obtaining competitive advantage, investment into the knowledge resource requires investment in training and Information, communication and technology (ICT) tools to facilitate the sharing and retention of knowledge, Kase et al, (2009:623). Knowledge management is not only associated with managing knowledge as a resource, but also to manage business processes that take place using that resource. It should involve the analysis of existing knowledge as a resource, as well as defining the objectives regarding the generation, protection and application of new knowledge, then transfer, exchange and dissemination of knowledge, effective use of knowledge and performance measurement. Williamson, (2004:1111) contends that the knowledge is generated from external sources by purchasing technology and software, hiring experts, using consultants and strategic partnership
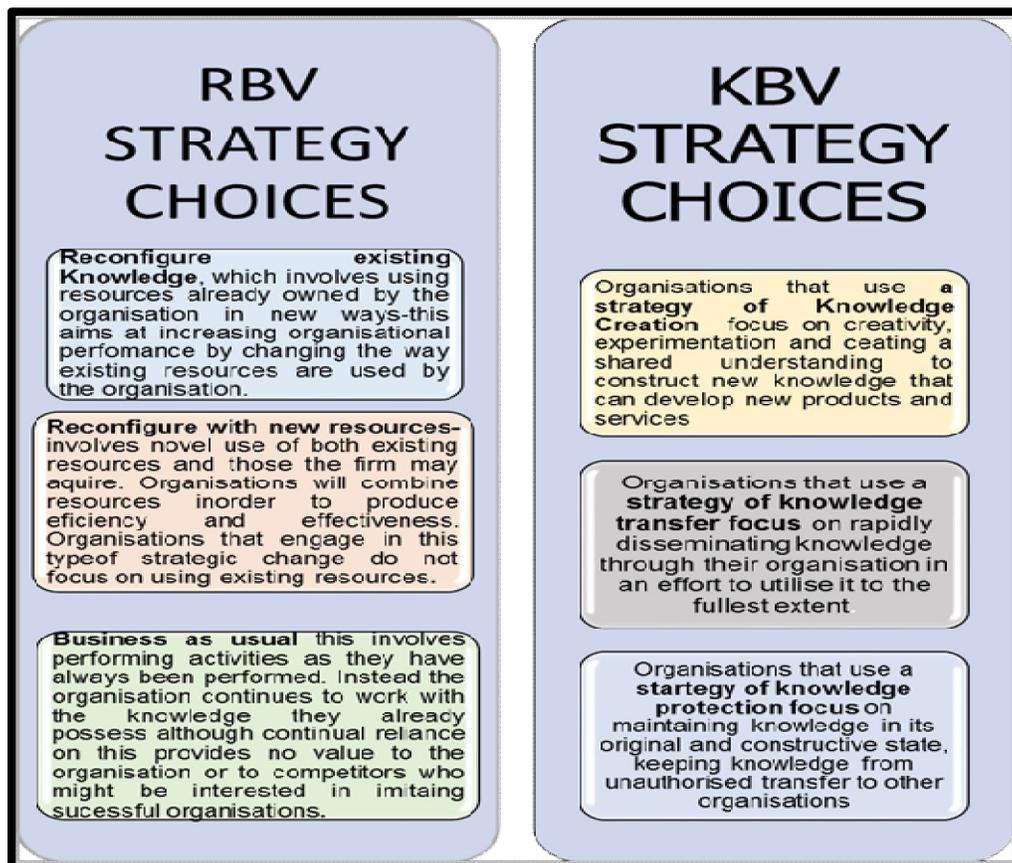

Figure 7: Resource Based and Knowledge Based Strategy as Strategic Choices
Author's Illustration with Views Adopted from Roos and Krogh (1996:1995)

Either choice of the strategy chosen as shown in Figure 7 can only enhance business performance for an organisation if it has identified areas that can be used to leverage gaps. Roos and Krogh, (2005:1995) interplay of resources and knowledge have to be considered equally before any strategy can be adopted.

2.1.15. The Role of Business Performance

The role of business performance dates back to the beginning of the twentieth century by Fredrick Taylor. His scientific management of Taylorism, which depicted organisations as mechanistic and rational entities that could be measured objectively, was considered robust given the increasingly evolving cultures and dynamic systems in organisations. This laid the groundwork for performance managements systems. The growing awareness of the value of performance measurement systems together with the recognition of the need for more sophisticated measures prompted organisations to experiment with non-financial performance indicators to complement the range of financial measures already used, Otley, (2009:70).

2.1.16. Critique of Business Performance Management

Raine and Williamson, (2010:21) allude that performance measurement and analysis is undertaken by individuals with subjective perceptions and personal agendas who may have limited skills in this area. This will have a major impact on the way such measures are used and applied and commonly leads to problems and even failure. Additionally, the lack of a

consensus in definition in literature does not provide universal agreement towards business performance's main characteristics and components, Rees (2010:35).

2.1.16.1. Total Quality Management (TQM)

This approach describes a management approach to long–term success through customer satisfaction. The focus is on improving processes, products, services and fostering a culture in which these elements work. However, it has been noted that TQM is only 'Total' when all employees and managers become engaged in the effort and think of quality not as a one-off program but as an on-going integral part of the business, Ukko et al (2007:44). They further alluded that fostering a "total culture" is complex given that individuals in organisation are motivated by different things, developing a culture inevitably takes time.

2.1.17. Benchmarking Against Best Practice

ACCA cited in www.bpp.com/accadefines benchmarking as the formalisation of the basic notion of comparing practices. It is a systematic analysis of one's own performance against that of another organisation, the overall objective of benchmarking is to improve performance by learning from the experience of others. Benchmarking identifies best practices in business processes and determines what constitutes superior performance. It allows for the gap between the expected performance and the actual state to be quantified.

2.1.18. Results Based Management (RBM)

Batici et al, (2006:1340) postulate that RBM focuses on driving change to achieve improved performance and results. In that context, there has been growing concern to look beyond organisational activities of inputs, processes and outputs for actual results.

However, the issue of results has been seen to be relative between internal and external stakeholders, a result that is seen as relevant to one may not be the same to another, Hyndman and Anderson (2011:24). Therefore, making the right choice about the role of the RBM system in specific cases is essential for good practice as it recognises its limitations when attributing cause and effect, Batici et al (2006:1343).

2.1.19. Balanced Scorecard Approach (BSC)

The balanced scorecard is a strategic planning and management system that is used extensively in business and industry, government, and non-profit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals. It was originated by Kaplan and Norton, (1996:76) at Harvard Business School as a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more 'balanced' view of organizational performance. While the phrase balanced scorecard was coined in the early 1990s, the roots of the this type of approach are deep, and include the pioneering work of General Electric on performance measurement reporting in the 1950's and the work of French process engineers (who created the Tableau de Bord – literally, a "dashboard" of performance measures) in the early part of the 20th century.

2.1.20. The Learning & Growth Perspective

This perspective includes employee training and corporate cultural attitudes related to both individual and corporate self-improvement. In a knowledge-worker organization, people -- the only repository of knowledge -- are the main resource. In the current climate of rapid technological change, it is becoming necessary for knowledge workers to be in a continuous learning mode. Metrics can be put into place to guide managers in focusing training funds where they can help the most. In any case, learning and growth constitute the essential foundation for success of any knowledge-worker organization.

Kaplan and Norton emphasize that 'learning' is more than 'training'; it also includes things like mentors and tutors within the organization, as well as that ease of communication among workers that allows them to readily get help on a problem when it is needed. It also includes technological tools; what the Baldrige criteria call "high performance work systems."

2.1.21. The Business Process Perspective

This perspective refers to internal business processes. Metrics based on this perspective allow the managers to know how well their business is running, and whether its products and services conform to customer requirements (the mission). These metrics have to be carefully designed by those who know these processes most intimately; with our unique missions these are not something that can be developed by outside consultants.

2.1.22. The Customer Perspective

Recent management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any business. These are leading indicators: if customers are not satisfied, they will eventually find other suppliers that will meet their needs. Poor performance from this perspective is thus a leading indicator of future decline,

even though the current financial picture may look good. In developing metrics for satisfaction, customers should be analysed in terms of kinds of customers and the kinds of processes for which we are providing a product or service to those customer groups.

2.1.23. The Financial Perspective

Kaplan and Norton do not disregard the traditional need for financial data. Timely and accurate funding data will always be a priority, and managers will do whatever necessary to provide it. In fact, often there is more than enough handling and processing of financial data. With the implementation of a corporate database, it is hoped that more of the processing can be centralized and automated. But the point is that the current emphasis on financials leads to the "unbalanced" situation with regard to other perspectives. There is perhaps a need to include additional financial-related data, such as risk assessment and cost-benefit data in this category.

2.1.24. Relationship between Knowledge Management and Business Performance

As noted by the observers in strategic management, effective KM through the development of capabilities should contribute to key aspects of business performance, Gold et al. (2001:211). Reconciling the insights and recommendations of recent literature within KM with performance-based assessment of the strategic management literature, we sought to identify the key contributions of KM capability. Such contributions may include improved ability to innovate, improved coordination of efforts, and rapid commercialization of new products. Other contribution may include the ability to anticipate surprises, responsiveness to market change and reduced redundancy of information knowledge edge Gold et al., (2001:211).

2.1.25. Knowledge Management and Competitive Advantage

2.1.25.1. Competitive Advantage Defined

Kotler (2000:42) defined competitive advantage as an organizational capability to perform in one or many ways that competitors find difficult to imitate now and in the future. Competitive advantage can be described as a management concept that has been so popular in the contemporary literature of management nowadays. The reasons behind such popularity include the rapid change that firms face today, the complexity of the business environment, the impacts of globalization and unstructured markets, the ever-changing consumer needs, competition, the revolution of information technology and communications, and the liberation of global trade Al-Rousan&Qawasmeh, (2009:82).

www.businessdictionary.com accessed on 7 February 2015 defined competitive advantage as a superiority gained by an organization when it can provide the same value as its competitors but at a lower price, or can charge higher prices by providing greater value through differentiation. Competitive advantage results from matching core competencies to the opportunities. Competitive advantage is a business concept that describes the attribute of allowing an organization to outperform its competitors, www.investopedia.com accessed on 7 February 2015. On the other hand, competitive advantage is an advantage over competitors gained by offering consumers greater value, either by means of lower prices or by providing greater benefits and service that justifies higher prices. www.tutor2u.net accessed on 7 February 2015.

In that context, competitive advantages are conditions that allow a company or country to produce a good or service at a lower price or in a more desirable fashion for customers. These conditions allow the productive entity to generate more sales or superior margins than its competition. In addition, competitive advantages are attributed to a variety of factors, including cost structure, brand, quality of product offerings, distribution network, intellectual property and customer support. Competitive advantages provide an edge over rivals and an ability to generate greater value for a firm and its shareholders. The more sustainable the competitive advantage, the more difficult it is for competitors to neutralize the advantage. www.quickmba.com accessed on 7 February 2015 posit that the two main types of competitive advantages are comparative advantage and differential advantage, which are explored, in the following text.

2.1.26. A Combination of Generic Strategies

These generic strategies are not necessarily compatible with one another. If a firm attempts to achieve an advantage on all fronts, in this attempt it may achieve no advantage at all. For example, if a firm differentiates itself by supplying very high quality products, it risks undermining that quality if it seeks to become a cost leader. Even if the quality did not suffer, the firm would risk projecting a confusing image. For this reason, Michael Porter argued that to be successful over the long-term, a firm must select only one of these three generic strategies. Otherwise, with more than one single generic strategy the firm will be "stuck in the middle" and will not achieve a competitive advantage.

Porter argued that firms that are able to succeed at multiple strategies often do so by creating separate business units for each strategy. By separating the strategies into different units having different policies and even different cultures, a corporation is less likely to become "stuck in the middle."

However, there exists a viewpoint that a single generic strategy is not always best because within the same product, customers often seek multi-dimensional satisfactions such as a combination of quality, style, convenience and price. There have been cases in which high quality producers faithfully followed a single strategy and then suffered greatly when another firm entered the market with a lower-quality product that better met the overall needs of the customers.

2.1.27. Relationship between KM and CA

The research explores the vital link between the management of knowledge in contemporary organizations and the development of a sustainable competitive advantage. In the current competitive context, many organizations have realised that the only source of sustainable competitive advantage they can leverage is the effective use of their existing knowledge as well as the fast acquisition and utilization of new knowledge, Carlucci et al (2004:582).

Massa and Testa (2009:132) argue that the competitive advantage of companies in today's economy stems not from market position, but from the difficulty to replicate knowledge assets and the manner in which they are deployed. In agreement with this viewpoint, Laudon and Laudon (2004:35) claim that "knowledge assets are as important for competitive advantage and survival, if not more important, than physical and financial assets"

2.2. Summary

The review of related literature was guided by the literature mapping which explored the origins and development of knowledge management leading to diverse definitions of knowledge management. Types of knowledge and knowledge management disciplines were explored together with the criticism of knowledge management. Additionally, best practices were assessed together with KM cycle so as to appreciate key models and theories that have been put forward to understand knowledge management processes of knowledge sharing, creation, transfer, application and retention. On the other hand, barriers to KM were analysed so as to benefit the study. The impact of organisational culture and leadership on knowledge management were examined as well as change management strategies.

The strategic role and choices of KM strategies such as Resource Based View (RBV) and Knowledge Based View (KBV) where explained in detail with the aid relevant case studies underpinned by definitions of business performance, innovation and competitive advantage. The critique of business performance provided a balance to the study. Furthermore, business performance measurements such as Total Quality Management (TQM), benchmarking against best practices, Results Based Management (RBM) and Balanced Scorecard (BSC) approach were explored for the study. Finally, the relationship between knowledge management and business performance, knowledge management and innovation as well as knowledge management and competitive advantage were examined and explored so as to establish appropriate conceptual framework for the study.

3. Methodology

This thesis is guided by the mixed methodology of the quantitative and qualitative paradigms. Their related philosophies of constructivist and positivist informed this thesis together with the epistemological and ontological reasoning of reality. It is clear that this thesis was also informed by the underlying conceptual values embedded in the quantitative and qualitative paradigms which in this case entails the deductive and inductive aspects of the research philosophies. These underlying values gave rise to the utilisation of the chosen research tools and analysis criteria and data presentation.

3.1. The Research Design

Saunders et al (2000:104) posits that the research design is a plan of how the research questions will be answered. In the same view, Hussey and Hussey (1997:51) highlight that it guides the researcher to focus the research so as to get the most valid findings. The design should include clear objectives as well as specify sources of data, Saunders et al (2000:104). It should include the research limitations and ethical issues.

3.2. Population

Saunders (2000:284) defines population as the study of objects, which could be individuals, groups, organisations, human products and events or the conditions to which they are exposed. On the other hand, Hussey and Hussey (1997:57) refers to population as a body of people or a full set of cases under consideration for research purposes from which a sample is taken. The target population for this research was VID stakeholders who included VID employees, both policy formulators and policy implementers, as well as VID customers. This gave the research balanced findings that were not biased. The researcher worked on sample size of 105 respondents. Due to mainly ethical and confidentiality reasons, secondary data was used to evaluate best practice.

3.3. Sample and Sampling procedures

Saunders et al. (2000:153) define probability sampling as representative sampling normally associated with the survey strategy. They believe that it enables the answering of research questions and objectives that require statistical estimation from the sample. This technique was used because it ensured that each case selected from the population is known and equal for all cases. Under probability sampling, stratified random sampling in particular was used because the technique divided the population into mutually exclusive and heterogeneous strata on the basis of staff, management and customers, www.ryerson.ca assessed on 7 January 2016. This ensured that the population was more representative. 20 respondents were customers, 35 were staff members whilst 50 were management. The researcher worked with a 5% margin of error.

3.4. Tools for Data Collection
As earlier highlighted, triangulation was used for this research and the following techniques were used:

3.4.1. Questionnaires
Saunders et al. (2000:308) defines a questionnaire as data collection technique where individuals are asked to respond to the same set of questions in a predetermined order. In line with Saunders et al. (2000:308) questionnaires were used in this research because they were an efficient way of collecting responses from a large sample. However, Esterby-Smith et al (1997:58) warns that producing a good questionnaire is not very easy. Care needs to be taken to ensure that the way the questions are structured answers the research questions.

A total of 105 questionnaires were distributed to clients and staff while some of the questionnaires were internet – mediated questionnaires because some respondents were too far to reach whilst other requested for the soft copies. Respondents were required to tick boxes as well as write any other comments they may have. Some respondents did not make time to respond and return the questionnaires on time and in those cases, the interview schedules approach, Saunders et al (2000:312), was used to enable researcher to progress. This involved the researcher going with the questionnaire to respondents and asking the questions face to face, ticking the boxes on their behalf.

3.4.2. Interviews
Saunders et al (2000:312) defines an interview as a purposeful discussion between two people. They highlight that the nature of any interviews done should be in line with the research questions and objectives. The method ensures that research questions are answered and objectives met.

Interviews were conducted with Senior VID personnel who include departmental heads. This was done because Hussey and Hussey (1997:58) pointed out that, one of the strengths of interviews is the process of open discovery. Focus group interviews were also conducted in the IT department which researcher believed would help to balance the research. This enabled the researcher to obtain different opinions within the limited time.

3.4.3. Observation
Saunders et al (2000:92) postulated that observations are normally neglected in research but this method can be rewarding. This view is supported by Easterby-Smith et al. (1997:69) who argues that observation is relatively under-used in various studies. The researcher, being an employee of VID, was able to observe processes at VID and that assisted in validating research findings.

3.4.4. Pilot Study
A pilot test is a pre-test and according to Saunders et al. (2000:290) it is aimed at refining the research questionnaires to enable respondents to complete them without any challenges. Bryman (1988:82) posit that it enables the researcher to get feedback on the questionnaire and ensures that questions are understood and answered in the correct manner. This validates the data to be collected and makes it more reliable.

The researcher piloted ten (10) questionnaires to staff members and five (5) to customers. The questionnaires had fifteen questions each but the general feedback was that the questions were too many and researcher had to reduce the questions to 10, which was more acceptable. The researcher also had to minimise the amount of questions that did not guide respondents i.e. that did not have boxes to tick, because respondents complained they did not have enough time to spare or did not understand some questions.

3.4.5. Data Presentation and Analysis
Quantitative and qualitative data was collected during the course of the research. This data was analysed and presented using various data presentation tools that include graphs and diagrams. Fisher (2004:140) recommends that when administering. SPSS software will be used for coding the data and analysis of the variables; however the graphical presentations in SPSS are not always clear as supported, Dellinger and Leech (2007:309). Microsoft Excel will be used for presentation of findings and content analysis was in turn used to augment key themes derived from the interviews administered.

The presentation of the data will be done by means of descriptive statistics in the form of graphical illustrations such as pie charts and frequency tables. The data collated was mostly qualitative and analysis was done using quantitative methods in the form of charts, histograms, and diagrams Narrative analysis will also be used to present results.

4. Summary
The topic of this research leveraged on knowledge based management and innovation: key strategic tools to unlock inefficiency and ineffectiveness in VID Zimbabwe.
The physical research process was carried out in Harare, Chitungwiza and Bulawayo due to the diverse representation for the study. The researcher made use of both quantitative and qualitative data research methods to balance and enrich the research. Interviews were conducted with VID policy formulators, policy implementers and customers leveraging on the 105

questionnaires that were administered. However, 86 responses were received from the questionnaires which translated into 82% response rate which is high enough to offer sound conclusions and recommendations.

4.1. Research Findings

The researcher will unpack findings that were informed by respondents on the extent of practices of knowledge management and innovation at VID in a bid to eliminate inefficiencies and ineffectiveness leading to improved business performance and growth of the organisation. Findings from the research are concluded as follows:-

4.1.1. Research Objective Number One

To identify how knowledge management can create competitive advantage and growth at VID The modus operandi at VID with regards to knowledge management has been characterised by a knowledge management system that is inferred in practice as outlined by 21% of policy implementers. Furthermore, more light was shed by policy formulators who noted that knowledge management was practiced at the organisation through identification of knowledge points, mentorship, through manual records of lessons learnt, best practice and through information sharing. It was emphasised by policy formulators that these processes had not been documented nor well structured to the extent that most employees are not aware that knowledge management exists in practice given that it has not been formalised.

The absence of such a strategy has had ripple effects on the organisational processes in that there are no guiding principles, budgets, tactics and processes that have been clearly defined to facilitate knowledge management processes such as knowledge sharing, knowledge creation, knowledge acquisition and knowledge retention. The failure of the organisation to espouse knowledge management strategy or policy has resulted in non alignment of employees' knowledge to the strategic objectives of the organisation given that employees are not fully aware of the impact of their knowledge towards the organisation's performance. Contrary to best practices suggested by Knowledge Management practitioners, the presence of a KM strategy has recorded success for the top 100 Fortune 500 companies, IBM, Microsoft, Honda and Wal mart who leverage competitive advantage by focusing on one or more knowledge processes that determine the strategic direction of the organisation.

4.1.2. Research Objective Number Two

To examine how innovation can create competitive advantage and growth at VID It was established that organisations innovate so that they can differentiate themselves in the marketplace, compete and grow. The basis of innovation should meet customer needs because the primary goal is to ensure that customers are satisfied with business products and services. In this context, VID can integrate customer's information so as to come up with innovative ways on how to deliver service speedily and more efficiently.

This notion is also supported by Krogh and Ross (1996:1991) who consider that knowledge resides both in the individuals of an organization and at the social level in relations between individuals. Knowledge is said to be "embodied"; that is, "everything known is known by somebody" Nonaka and von Krogh, (2009:650).

4.1.3. Research Objective Number Three

To evaluate knowledge management and innovation within VID the research noted that knowledge management processes were not practiced at VID hence the application of knowledge management and innovation needs to be espoused by the organisation in order to reposition its competitiveness. The researcher considered that by adopting the knowledge management strategy, the knowledge worker will be motivated therefore leading to a knowledge organisation that will lead to the improvement of business performance and achievement of strategic objectives. In that context, high scores were recorded for responses that suggest that VID does not have tools in place to measure knowledge management processes contribution towards business performance as indicated **by** 60% response rate.

It can be concluded from the research findings that policy implementers who are the custodians of the organisational strategy are not aware of the contribution of knowledge processes towards the performance of the organisation as indicated by the 60% response. This was further confirmed by policy formulators who acknowledge that no formal training had taken place in order to conscientize policy implementers as well as policy users over the contribution of knowledge towards the success of the organisation. This study confirms research by Ginman(2012:96) who indicated in his study that 65% of organizations that are currently implementing KM initiatives have not measured the impact of their performance.

4.1.4. Research Objective Number Four

To establish how VID can improve and sustain competitive advantage through knowledge management to improve business performance It is noted from the study that VID needs to rigorously work on the absence of knowledge sharing, knowledge creation, knowledge training, remuneration and rewards, knowledge retention and customer perception which are unpacked in the following text.

4.2. Knowledge Sharing

The effects of not having a knowledge sharing strategy or policy has a negative impact on knowledge processes. The researcher observed that there is a subculture at VID characterised by segmentation of knowledge amongst individuals and departments resulting in knowledge sharing that is not cooperative but competitive in nature. As a result, findings suggested that the challenge with improving business performance can not only be addressed by a knowledge management strategy in isolation given that resources were also noted as key constraints towards implementation of innovative ideas by employees. Organisations that have knowledge sharing embedded in their organisational culture have testified to its limitless benefits when essentially cascaded down to policy users as was demonstrated by findings of Nonaka and Takeuchi in their research on Japanese companies whose success was attributed towards effective knowledge sharing and a spirit of Zen Buddhism is what enforced knowledge sharing.

4.3. Knowledge Creation and Acquisition

Respondents to the study concurred that attempts to put in place ICT hardware and encouragement towards documentation of best practices and lessons learnt is evident. However, there is work to be done in ensuring accessibility of ICT and protection of knowledge in the event that an employee leaves the organisation. In this context, adoption of an electronic knowledge system would ensure a smooth knowledge transfer process that is sighted as key to knowledge management given that currently there is no system in place that captures, retains and facilitates knowledge transfer without relying on written documentation that may not always be available when required.

The researcher noted that knowledge creation continues to move in a cycle of silos in the absence of an electronic knowledge system. There is knowledge management in the form of manual records as documented files on individuals' computers and laptops yet there is no centralised repository to store, gather, receive and process this information.

4.4. Knowledge Training

Although appropriate ICT enablers are key to overcoming challenges experienced with knowledge retention, transfer and acquisition, findings also unpacked that team building exercises, mentorship and coaching were programs in place to extract knowledge from employees. The researcher observed that the current programs in place have not been documented and this raises concerns towards knowledge transfer and knowledge access as those mentored and coached may fail to impart their learnt knowledge effectively.

4.5. Remuneration and Rewards

Gaps were revealed from findings on how the organisation encouraged, evaluated and rewarded their employees. Findings showed that VID does not follow theoretical persuasion that employees should be evaluated based on their social, human capital and rewarded on their engagement in knowledge sharing activities. Respondents perceptions is that rewards can be instrumental in encouraging knowledge sharing and acquisition as little recognition and acknowledgement was given to those who shared knowledge and thus the motivation to do so was still to be assessed. The researcher observed that, for knowledge management to be effective in improving business performance, leadership support and involvement is critical in creating a shared vision, mission and aligning its human resources towards the objectives it has set to achieve.

4.6. Knowledge Retention

The researcher supports the notion by Guptara, (1999:28) who posited that the ability to retain knowledge in organisational memory is essential for maintaining competitive advantage. As knowledge is a continuous cycle, it is essential that knowledge be recorded and kept, least it remains tacit and without any benefit for the organisation that has a knowledge management strategy in place.

Findings suggested that there has not been utilisation of databases to store and record best practices and lessons learnt that improve business processes at VID. There was a low score on responses who indicated that there are systems in place to capture and retain knowledge through written documentation and databases although there was need for improvement so as to make them effective. In addition, the majority of the respondents scored high in the question towards availability of written documentation to capture lessons learnt and best practices. There was acknowledgement from policy formulators that showed that there were areas to improve in adopting appropriate software to facilitate the capture of knowledge using relevant technology as the organisation has invested in hardware and not much in software.

4.7. Customer Perception

The researcher considers that customers are a critical mass for the survival of the organisation. In this context, there was a negative response from the majority of customers who felt that knowledge management was not being practiced at VID. A high negative response was recorded from respondents that the systems did not have facilities for clients' convenience such as online booking and testing. As a result, the majority of clients concurred through another negative high response that they were inconvenienced by delays in the production of driver's licence disk. Additionally, respondents strongly disagreed in their responses that the issuance of client's documents is computerised. However, on a positive note, high scores from respondents concurred that the incorporation of a knowledge management system would improve service delivery at VID.

The researcher's conclusions from the findings suggested that there are no facilities to support convenience of clients such as online booking and testing hence failing to meet clients' expectations. Additionally, clients were unhappy with the delays in the driver's licence disc production taking between 6 months to a year in some cases due to lack of real time ICT infrastructure. Their unhappiness with the quality of service delivery is confirmed by Kotler (2000:106) who posits that one unhappy customer will talk to twenty other customers about their unhappiness of the service and each one of the twenty will spread the unhappiness to other clients leading to a multiplier effect. This notion will lead to loss of repeated sales and customer loyalty which will result in declining business performance and bottom line.

The researcher concurs with Kaplan and Norton (1996:76) that recent management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any business. In developing metrics for satisfaction, customers should be analysed in terms of kinds of customers and the kinds of processes for which we are providing a product or service to those customer groups. VID can leverage on this information to improve its service delivery and meet customer needs to avoid loss of revenue.

<u>4.7.1. Research Objective Number Five</u>

To proffer conclusions and recommendations on how to achieve growth through knowledge management and innovation at VID The objective will be informed by the findings from the respondents leveraging on best practice that will assist in closing the gaps that have been identified as proffered in the following text.

4.8. Implications and Recommendations

This section of the research seeks to put forward recommendations to the gaps identified in the conclusions. The researcher subscribes to the theory of the knowledge management cycle by Nonaka and Takeuchi, (1995:88) that augments successful knowledge management through harnessing either knowledge sharing, knowledge creation or acquisition and knowledge retention informed the following recommendations.

4.9. Implement a Knowledge Management Strategy

The main finding that came out of the research was the glaring absence of a knowledge management strategy, either as a standalone or as an integrated system into the organisational strategy. The knowledge-based strategy that VID can implore would inculcate key principles of knowledge creation, retention and acquisition. The researcher is of the view that, knowledge based strategy could begin with an internal audit of the knowledge gaps and an audit of existing knowledge and supportive elements that the organisation can harness. Figure 8 below illustrates the key aspects to be incorporated in this strategy.
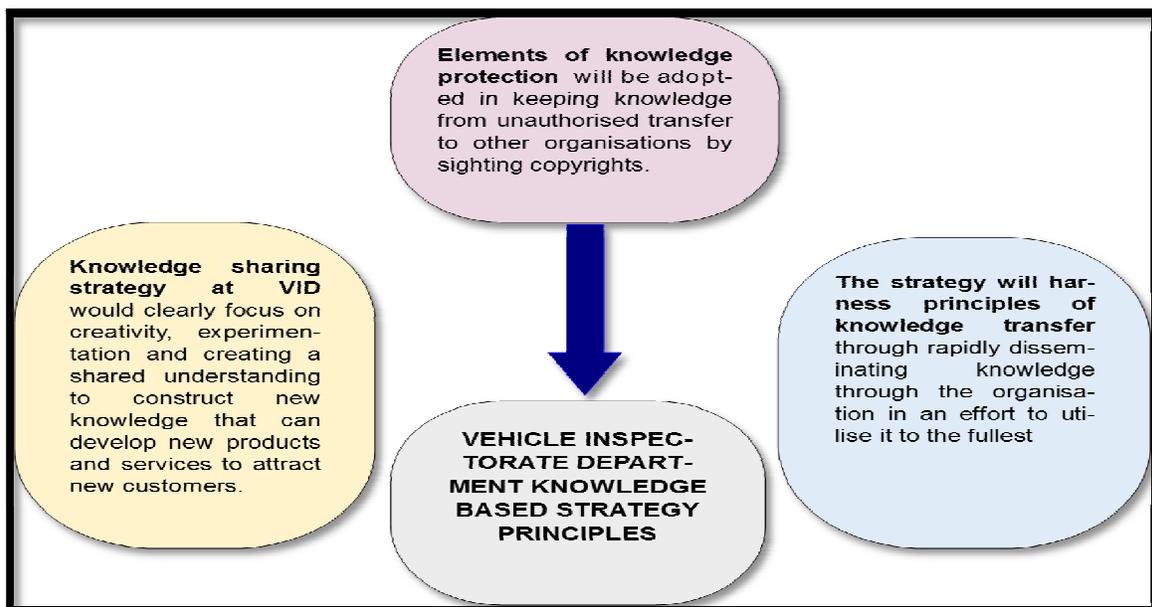

Figure 8: Knowledge Based View - Knowledge Management Strategies in Relation to VID
Source: Author's Illustration of Proposed Strategy with Views Adopted from Roos and Krogh (1996:45)

Key to the knowledge-based strategy will be knowledge sharing at the apex, knowledge sharing principle will be augmented as a key performance indicator and also evaluated in the performance management measurement. This will encourage members to share knowledge across all departments from which knowledge sharing comes valuable knowledge creation and quality knowledge that will be retained and stored into the organisational memory.

VID need to acknowledge and reward shared efforts rather than individual given that research findings draw down to the absence of knowledge sharing to facilitate knowledge creation and knowledge transfer. In this context, knowledge management procedures and principles would be operationalised by the knowledge-based strategy that will be endorsed by management as a working document governing operations at VID. The endorsement will go a long way to ensure management support and conjure accountability towards the success of the strategy.

4.9.1. Formulate Knowledge Management Policies
Researcher is of the view that these policies will support the knowledge-based strategy by formalising all knowledge sharing, creation and retention processes into the mainstream of the business. These policies will influence the presence of knowledge in service delivery, performance measures and organisational performance.

4.10. Overcoming Resource Challenges
The researcher observed that the majority of respondents raised the issues of resources constraints therefore suggesting the prioritisation of budgets towards knowledge innovation through commercialising some key activities that the VID carries out. These include the annual compulsory inspection of all vehicles in Zimbabwe that has the potential to increase the organisations' revenue. Currently only public service vehicles which constitutes a mere 5% of Zimbabwe's vehicle population are obliged at law to undergo an annual compulsory inspection leaving the majority on the loose and therefore the strategy is not capturing the rest of the vehicles.

There is huge potential to grow revenue by inspecting all vehicles through the annual compulsory inspection strategy and this will in turn reduce the burden from the fiscus and declare dividend for the shareholder. These measures would then invite innovative thinking from employees to identify key elements that can continue to raise funds for the knowledge based strategy implementation once revenue avenues have been identified.

The issue of resource challenge is a recurring theme from the responses put across by policy formulators, implementers and users as all acknowledge that there is need to have resources in place and a budget dedicated towards knowledge management initiatives. In this context, the availability of a separate budget and revenue avenues for knowledge management will enable activities focused on knowledge management to have separate attention and a dedicated budget in order to come up with a knowledge management system. This dedicated budget would enable a system in place to measure knowledge management contributions to the organisation's performance. Figure 9 below further amplifies effective utilisation of key resources that VID can leverage on.
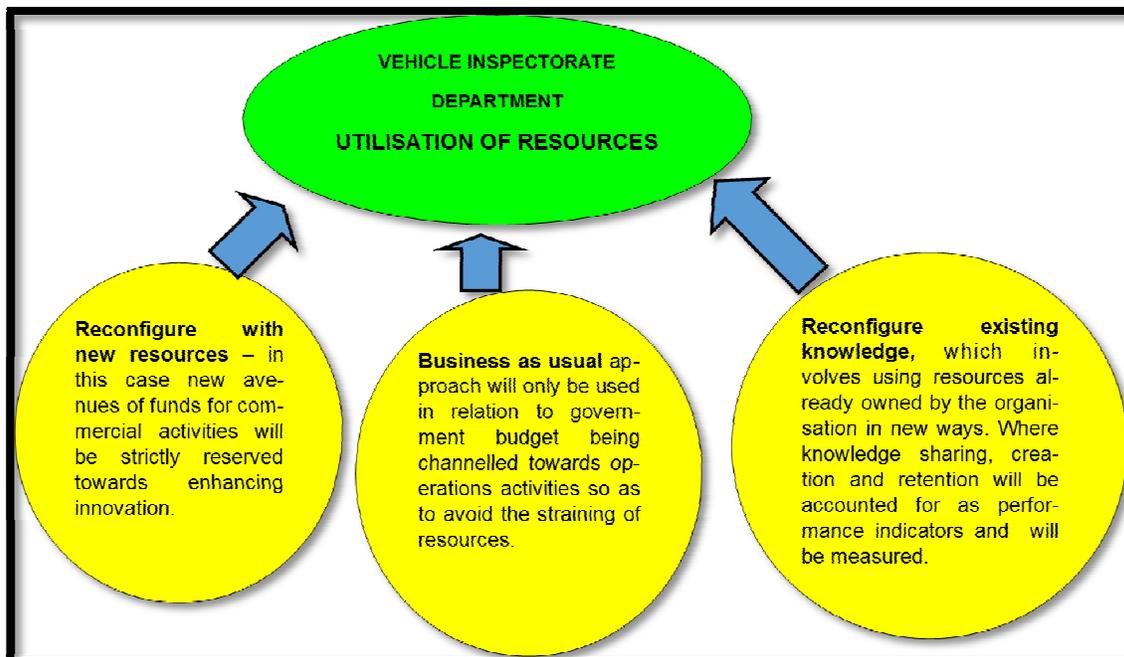

Figure 9: Resource Based View - Knowledge Management Strategies in Relation to Vid
Source: Author's Illustration with Views Adopted form Dalkir, (2005:69)

4.11. Central Repository System and Database Creation
The researcher noted that knowledge processes such as knowledge created and knowledge acquired need to be documented into a knowledge repository that will allow for retrieval in future where a centralised repository or knowledge library needs to be invested into. In addition, appropriate software would need to be purchased in order to facilitate this

process. In the interim, VID can make use of its information portals through a central server in each department where all kernels of lessons learnt and best practices are kept so as to enable convenient retrieval.

Furthermore, databases can also be created to capture the aforementioned on the main departmental server given that hardware is available. These can then be networked to all other departments whilst a system is been built up and funds are mobilised. In that context, it has been noted that the value of knowledge as shown in the research does not only reside in internal members but external stakeholders are also valuable contributors of the organisations' knowledge base. These stakeholders may influence best practices for the organisation to adopt through the use of suggestion boxes and toll free numbers for customer feedback.

4.12. Knowledge Management Measurements

Finally, key to all these processes are their contribution to the organisations' performance. Given that the organisation is introducing Results Based Management System (RBMS), some tangible results provided by the current balanced scorecard approach can be adopted in the interim and then synergise it with RBMS when fully implemented and its performance measures communicated to all employees. These measures will be adopted in the mainstream organisational processes. As shown in Table 3 below, the balanced scorecard will be used as a measurement tool to assess and also to be used as possible measure of the following perspectives;

Perspective	Possible Measure
Customer	Customer feedback towards the quality of information received from employees and the value of this. This can also be measured in terms of response time to problems.
Internal business processes	Lead time taken towards initiation of innovative exercises or programs to the implementation of these. Number of innovative products and services that have been offered to customers and the effectiveness of these.
Learning and Development	Productivity rate of teamwork to be determined in performance appraisals as sighted in the strategy recommendation. Contribution of training initiatives towards leadership efficiency and personal development.
Financial	Assessment on Return on Investment from training initiatives undergone and innovative projects initiated. Number of new customers that can be attributed towards knowledge sharing initiatives Revenue generated from innovative initiatives from teams. Organisational growth Best Practices

Table 3: Measuring Km Performance THROUGH BS.C

It is the researcher's conviction that some benchmarking exercises would need to be done given that a knowledge management strategy and its systems is a learning experience to the organisation. This will assist VID to learn from other organisations who have these systems in place and how these can best be replicated to suit the organisation and the environment it operates in. It is recommended that the knowledge-based strategy be resident at VID Head Office so as to effectively cascade it downwards.

5. Implementation Issues

Johnson and Scholes, (2008:708) posit that when assessing strategies, three types of evaluation criterion can be used. In this context, the proffered recommendations will be assessed for their Suitability, Acceptability and Feasibility.

- Suitability - determines if strategic choices are suitable and compatible with VID's external environment. The recommendations of a knowledge based strategy is suitable to internal and external stakeholders given that there has been growing consensus that any organisation can imitate tangible resources but knowledge cannot be imitated as it is resident in individuals' minds.
- Feasibility – assesses whether VID has the resources to pursue the recommended knowledge based strategy given that VID is largely government funded. Furthermore, other key resources such as employees' knowledge, time and structures are in place that support the implementation of this strategy.
- Acceptability - assesses the return and benefits that the organisation can derive such as Return, Risk and Stakeholder actions. The stakeholder mapping in terms of power and interest is provided in Figure 10.that shows VID employees

have a high power and high interest to determine the implementation and success of the knowledge based strategy and there is buy in into the strategy, whilst Government has the high power to support the strategy in terms of its potential contribution towards the GDP.
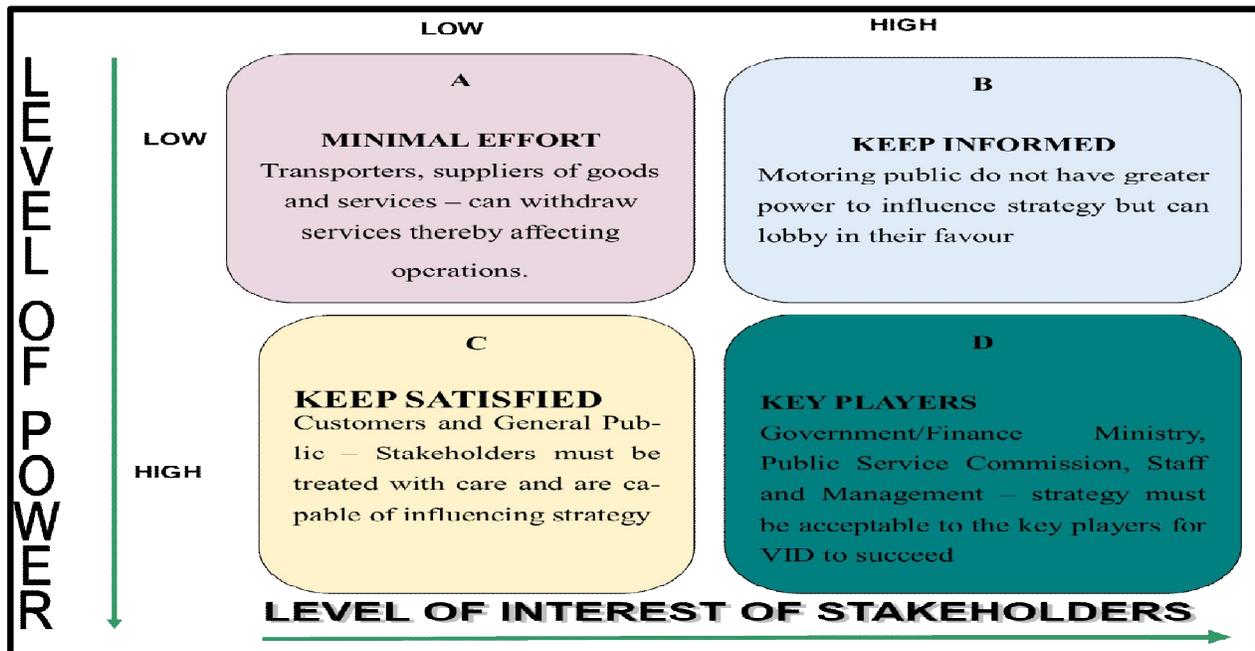

Figure 10: Stakeholder Mapping to Determine Acceptability of KM Strategy
Source: Authors Illustration with Elements Adopted From Johnson and Scholes (2008:216)

5.1. Implementation Plan

The implementation plan summarizes the activities to be pursued following the proffered recommendations. The cost implications will be met from proceeds from commercial based activities to be pursued and a dedicated stand-alone budget will also be used. The following key implementation activities will be spread over a 5 year period in order for the strategic plan to be implemented, rolled out and measured;-

- Training and development **-** continuous improvement as suggested by the Kaizen principle is important in all business strategy. In relation to knowledge that is always changing and revolving, innovative ideas have been constantly created using this principle to ensure continuous training, upgrading of skills to foster and supplement the knowledge-based strategy.
- Change Management**-** Grant, (2005:72) has emphasised the need to manage change given its complexity and its uncertainty when received by those affected. In this context, knowledge strategy will transform cultural practices from competitive to collaborative efforts, from personal rewards to communal rewards, from no measurements to performance measurements in the knowledge process. Such an initiative would ensure accountability and sustainability of the processes as these agents will be critically involved in all implementation processes.
- Leadership Commitment **-** Peters and Waterman (1982:65) posit that employees distrust employers that do not walk the talk. In this context, it would be imperative for leadership to take a strong commitment towards the implementation plan so as to ensure that successful implementation is achieved**.**

5.1.1. Barriers to Implementation

The researcher identified potential barriers to implementation as follows:-

- Financial Barriers **-**VID needs to take cognizance of the fact that low worker morale will also result in reduced revenue with long-term effects in comparison to short term revenue reduction which could be made up when worker morale is high and employees are performing. The researcher believes that an independent cost-benefit analysis by VID on recommended expenditure on the programme will reveal that the benefits far outweigh the costs. The proposed implementation plan should leverage on availing of resources by the finance department.
- Technological barriers- Therefore, extensive training would be needed to equip expertise to manage technological barriers which is aggravated by rapid changes in the types of policy being considered.
- Organisational culture- In this context, resistance to this change from staff internally is envisaged which will require strong transformational leadership commitment to foster tshe strategy in place and strong buy-in from employees. Leadership can manage resistance through capable negotiating skills which should see the resistance to implementation being overcome without much difficult.

5.2. Further Research

The researcher is of the view that caution is needed when generalisations are sought given that the research was based on a single case study although the literature explored wider studies and debates elsewhere to enrich and provide a balanced view. In that context, given global rapid technological developments and advancements, further studies into KM practices of similar organisations would provide insights that will enrich policy makers, policy implementers, policy users, customers, employees, stakeholders, researchers, universities, corporates and nations at large.

A follow-up research to the actual implementation of the proposed KM strategy would be needed to ascertain if the results were utilised. The researcher is of the view that a longitudinal study would be ideal for this process to be successful.

5.3. Limitations of the Study

As a researcher, all attempts were made to minimize the research's limitations but like all studies chances of nil limitations are rare. Certain limitations on findings and interpretations of the findings may need to be highlighted as indicated below.

The researcher encountered difficulties to extend the survey to employees who have left the organization as well as customers who were in remote towns.

This study used urban centres but no attempt was made to validate the data collected from other centres in view of time, practical feasibility of the administration of the questionnaire and resource available with the researcher

The research focused on VID which is a Government Department therefore obtaining some classified information was difficult given that it is privileged information.

The researcher faced challenges in obtaining KM strategies from similar institutions in SADC for purposes of benchmarking as these strategies are not shared amongst Member States.

The researcher had limited resources because sponsors are hard to come by in Zimbabwe and this researcher had to do with a limited budget in a strained economy suffering from liquidity crunch only covering 6 universities out of a possible 18 state and private inclusive.

The research's sample size which had almost 80% males and about 20% females denied the researcher a balanced view based on demographic relationships

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