



FAN-IITTS PUBLICATION
Alor, Flores, Lembata, Rote, Sabu, Sumba, Timor

**Journal of
NTT
Studies**

Journal of NTT Studies
1 (2) (2009) 095-135
ISSN: 20856504

Open Access

RESEARCH ARTICLE

The Implications Of Knowledge Management Sustainability For Leadership In An Organization: An Exploration and Analysis of Leadership Theories and Knowledge Management Practices In Bangwita Flores, Indonesia

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(Final version received on 10th Nov 2009, Approved on 19th November 2009)

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The Interdisciplinary Journal of NTT Development Studies - An International Bilingual Journal

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ABSTRACT: *Knowledge management has been recognized as an effective tool for improving the performance and productivity of organizations in this knowledge era. In this sense, knowledge management is a process. Knowledge management is a process of acquisition, validation, utilization, sharing, storage and diffusion of knowledge. However, many organizations have not implemented knowledge management in their strategic vision, mission and goals. Some organizations have articulated knowledge management, however, in an unsustainable way. One of the reasons is the limitation of leadership in accessing knowledge and the sources of knowledge. For that reason, this study attempts to address the implications of knowledge management sustainability for leadership in organizations through reviewing the contemporary literature and analyzing knowledge management practices in Bangwita. This study concludes that knowledge management sustainability in the organization has the implications for leadership. These implications are that knowledge management is a driving force for leaders in designing vision and mission in the organization, creating a conducive environment for knowledge management initiatives, empowering, creating knowledge management systems and openness to change. This study is contextual. The objective is to offer insights into the knowledge sharing process and the results to a wider community who can consider the transferability of knowledge in their own context.*

Key words: knowledge management ; leadership ; organisation ; Flores

1. Introduction

We must be prepared to look beyond our traditional roles and seek new and innovative ways to best gather the contextual knowledge relevant to each and every inquiry, mining not only textual or digital formats but the inherent knowledge of our co-workers, opening up valuable information through knowledge management (Richer, 1999, p. v).

1.1 Background of the Study

Knowledge has been acknowledged as an asset, capital and resource in improving organizational performance for competitive advantage (Patriotta, 2003) and knowledge management has become a standard practice in organizations (McInerney, 2002). Knowledge management has become a vital entity in the organizational operations (Zuber-Skerritt, 2005). However, many organizations have not implemented knowledge management as a strategic vision, mission and goals effectively. This issue of not embracing the sustainability of knowledge management in the organization is also faced by Bangwita.

The outcomes of this study for the organization were indeed contextual and were made collective with the objective of offering insights through a knowledge sharing process. The study has an impact on the wider communities and other stakeholders who can consider the transferability of ideas and knowledge in this account to their own context. Likewise, in sustaining knowledge management strategy from within the organization is a new challenge and commitment for leaders and leadership and staff, to be continuously learning and mining knowledge in the process of carrying out the organizational program activities. Therefore, leaders and staff should embrace the benefits of a systematic and structured collective learning in improving knowledge management practices in the organization.

1.2 Organizational Setting

YLPM-Bangwita (*Yayasan Lembaga Pemberdayaan Masyarakat untuk Pengembangan Wilayah Tana Ai* = The Community Empowerment Foundation for the Development of Tana Ai Area) is an NGO, established on December 5th, 1994 (Bangwita, 2002). Bangwita, however, established its legality on February 2nd, 2002. The existence of Bangwita is as a concern to the reality faced by the Tana Ai community, such as the low quality of human resources, social-economic hindrances, the low bargaining position for public policies, injustice, gender inequality, the lack of access and control of resources in the process of development, the low level of local leader capacity and hindrances in the life of democracy (Bangwita, 2003).

These conditions motivated Bangwita in attempting to improve the community's life, especially the poor and the poorest, based on the vision of solidarity, empowerment and self-reliance of the Tana Ai Community in the struggle for their rights and for the environment. The mission is to empower the Tana Ai Community, in order to free them from poverty, so that they can live with solidarity, empowerment and self-reliance. In

order to achieve this vision and mission, Bangwita has an approach that is ‘Kulababong’. Kulababong means discussion, dialogue, education, training, and learning together (Bangwita, 2002).

1.2.1 Organizational Values and Principles

Bangwita has some values and principles through which all organizational operations are guided. These values and principles are 1) Vision-driven, 2) Trust, 3) Respect, 4) Sustainability, 5) Openness, 6) Participative, 7) Gender Perspective, 8) Good governance, 9) Accountability, 10) Transparency, and 11) Collaborative or Cooperative.

1.2.2 Organizational Structure

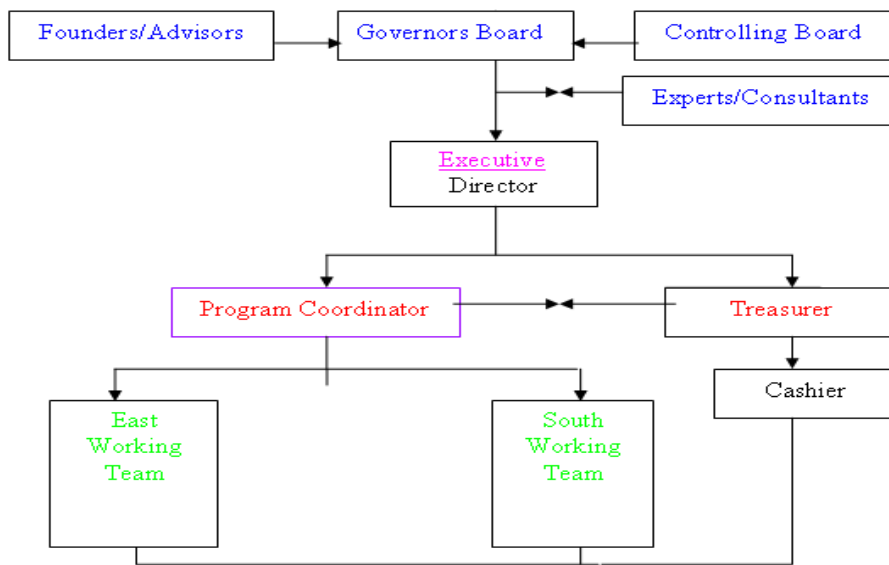


Figure 1.1: The Organizational Structure (Adapted from Bangwita, 2007).

1.2.3 Programs

The entry-point of Bangwita’s program is agricultural development, which focuses on integrated and sustainable/organic agriculture (Bangwita, 2002; 2005). However, as a dynamic organization, Bangwita has some other activities. These activities are: 1) Environment conservation, 2) Subsistence crops development, 3) Cash crops developing, 4) Livestock developing, 5) Advocacy and Gender Awareness, 6) Education, and 7) networking.

1.3 The Problem Statements

Knowledge and knowledge management have become the advantage indicators of organizations in recent years. The literature on the knowledge concept and knowledge management practices, however, figures out the complexities and problematic perspectives of knowledge sharing and knowledge management implementation in the organizations. Blackler (1995) underlined the complexity of knowledge concept and the limitation of relevant application of this concept to the organizational theories and operations. In terms of knowledge management, few experts in the literature admitted

that knowledge management practice is so young (Hansen *et al.*, 1999) and it was so new and untested (Prusak, 2001).

The key issue in the literature surrounding employees and especially leaders and leadership's commitment and participation in managing knowledge is the difficulty of articulating and implementing the conceptual framework into a sustainable approach in the organizational practices. The main challenge many organizations face in taking leading roles in implementing knowledge management in the organizations is on how to learn and struggle in sustaining this practice (Wick, 2000). Essentially, these problems were epistemologically and ontologically based. This means the problems are generated from the nature and philosophy of knowledge and knowledge management and as well as engendering from the real practice of knowledge creation and effective knowledge management (Murray, 2000) in the organization.

These problems also happen in Bangwita. Bangwita has carried out program activities in relation to knowledge acquisition such as training, secondment, survey, study tour, workshop, seminar, education, advocacy, gender awareness campaign and promotion, researches, networking, participatory rural appraisal (PRA), organizational self-assessment (OSA), organizational strategic planning, conflict resolution and social analysis (Bangwita, 2005). The problem is on how to document and codify the results of these activities as knowledge assets and managing these knowledge assets in the organization continually (Bangwita, 2003). Ultimately, the problem of articulation and implementation of knowledge management strategy in a sustainable way in the organization is not straightforward and the potential solutions and resolutions evidently need a wide range of strategies and a strong and visionary leadership on how to structure and institutionalize this practice in the organization.

1.4 Purpose of the Study

The main problem identified in this study is the limitation of strategic management in managing knowledge in the organization. One of the factors affected this problem was the limitation of leadership breakthrough in every level of the organization in sustaining knowledge management strategy. Therefore, the purpose of this study is firstly, to explore and analyze the strategies that would sustain knowledge management in the organization. The second purpose is to determine and to address the problems underpinning the implications of knowledge management sustainability for leadership in the organization.

1.5 Significance of the Study

Knowledge management is viewed as an entity through which people or the organization establishes new decision-making processes and re-conceptualizing the organizational structures. However, in Indonesia, especially in Bangwita Flores, this realm of knowledge management practice is considered as relatively new. As a result, the significance of this study is to contribute to:

- Enrich the body of knowledge in general and especially in the NGOs sectors in Flores Indonesia. This will fill the gaps in the body of knowledge in terms of knowledge management practices in the organization.

- A better understanding of the needs of knowledge management sustainability in the organization, especially enabling leaders and leadership in Bangwita in the policy-making and program design processes.
- Providing a framework of knowledge management process in the organization for the future practices. #

1.6 Research Questions

The main purpose of this study is to explore the implications of knowledge management sustainability for leadership in the organization. Thus, there are two key questions underlying this study. These questions are:

- 1) What are the strategies for growing and sustaining knowledge management in the organization?
- 2) What are the implications of knowledge management sustainability for leadership in the organization?

1.7 Methods of the Study

The theoretical and analytical basis of this study is written materials of fundamental relevance to the study. The study will be restricted to published literature, such as books, journals, articles and organizational project proposals and profile. However, website-based materials are investigated. Inevitably, the tacit materials through personal communication have the salient influence to this study. The nature of this study is mostly qualitative and interpretative (Denzin & Lincoln, 2000; Schueber, 2003).

Predictably, this study was not to review all the literature; however, it was a mapping out of the core information in relation to the field of study (Schutz, 2006). Consequently, at this stage the synthesis skills and the deep reflection on the topic are really fundamental and enable a synthesis of the relevant information and materials in order to produce a substantial-qualitative analysis and set of outcomes. Finally, this study proposes a model or framework for the knowledge management process in Bangwita.

1.8 Structure of the Study

This study has been structured and organized to cover the main aspects of leadership theory and knowledge management practices in Bangwita so that it becomes a comprehensive and holistic analysis. Firstly, this study introduces the broad context and the background of the study. The second section explores the conceptual and analytical framework or theoretical perspectives of leadership and knowledge management as the basic foundation for the next Sections. Knowledge management practices in Bangwita and the proposed framework of knowledge management process for Bangwita are discussed in the third section. In the fourth section the study discusses the implications of knowledge management sustainability for leadership in the organization. Then, this study synthesizes the cases explored in the previous sections and draws some conclusions. Finally, this study proposed an agenda for the future studies on the implications of knowledge management sustainability for leadership in the organization.

2. Leadership and Knowledge Management: Theories and Analytical Framework

Understandings of the very nature of knowledge, how it is generated and created, how it is represented and structured, and how it is accessed and utilized were seen as fundamental to effective knowledge management. Also perceived to be important were understandings drawn from cognitive science, information user behavior, and cognitive psychology. These centre on understanding people dynamics and interactions, how people learn, and how people connect with, interact with, utilize and share ideas within an organizational framework (Todd & Southon, 2000, p. 142).

2.1 Leadership Theories: A Brief Overview

The discourse on leadership has become a hotly debated topic over the last three decades. However, there has been no consensus between experts on the nature and philosophy of leadership. This study analyzes the concept of leadership from the different points of view proposed by experts and practitioners. Thomas Aquinas stated, “philosophy is not studied in order to find out what people may have thought but in order to discover what is true” (in Mendonca & Kanungo, 2007, p.11). Drawing on this idea, this study is the search for true leadership in managing knowledge in the organization in a sustainable way.

The terminology of leadership has widely ranging meanings and has different interpretations from one expert to the next. Experts and practitioners usually define leadership according to their individual perspectives (Mehta & Krishnan, 1999) and the concept of leadership is full of ambiguity, dilemmas, and paradox (Rosenbach & Taylor, 2006). Moreover, leadership has many components to be investigated and to be learned (Leaming, 2003). Leaming (2003, p.226) went on to describe:

Leadership is one of the most studied fields. Yet, there is so much to learn. Leadership as a concept is sometimes hard to wrap your mind around. Good leaders come in different shapes and sizes and their approaches can be very different. Some leadership approaches that work well for some will not work at all for others. Despite this, there are some common principles that are agreed upon by most scholars.

This definition implies several important elements. First, leadership is one of the most studied fields. Leadership has been investigated and discussed intensely (Rosenbach & Taylor, 2006). However, it is still lacking in clarity. Rosenbach and Taylor (2006) claimed that most people remain sceptical about leaders and leadership. Second, there is so much to learn about leadership. There are many interrelated aspects of leadership, such as characteristics, behaviours, roles, traits, leaders, followers, management, structures, cultures, and organizations (Bell, 2003; Mendonca & Kanungo, 2007). Third, leadership is a complex concept, which is difficult to define simply (Lussier & Achua, 2004). It can only be described by its characteristics.

Fourth, leadership has different shapes, sizes and approaches. To understand leadership fully, it can be approached through conception, styles, characters and behaviours (Razik & Swanson, 2001; Mendonca & Kanungo, 2007). Hartle and Hobby (2003, p.391) argued, “every organization has many leaders because there are people at each level in the hierarchy who play critical roles in generating and sustaining creative tension”. They come from many places in the organization (Senge, 1992). Finally, leadership has common principles. The elements of these leadership principles are the leaders, the followers, the situations, social and community context (Mendonca & Kanungo, 2007). Therefore, leadership can have a different meaning from one person to the others.

This study argues that leadership requires a wide range of skills, capabilities, and competencies in facilitating the process of achieving the common strategic goals in the organization. Leadership is the art and capacity of facilitating the process of achieving the organizational strategic objectives. For that reason, leaders are not bosses, but facilitators, who embrace the salient roles to facilitate the process of reaching the organizational vision and mission. More specifically, in this study, leaders and leadership have a great impact on the sustainability of knowledge management in the organization.

2.1.1 Leadership Styles

The success or failure of the organizational strategic goals significantly depends on the styles of leadership. Leadership styles can bring about a wide range of both positive and negative changes in the organization (Mendonca & Kanungo, 2007). As an example, Indonesia under Soeharto’s leadership has been successful in the aspects of economy and security, whereas the aspects of human rights, democracy and education have been ignored.

Leadership styles can be described as the pattern of behaviors of a person who is designated to a position of influence in an organization (Razik & Swanson, 2001). Leadership styles are the ways leaders perceive their workers and interpret their actions which affect the leader’s behavior toward the workers or mutual leader-follower behavior (Razik & Swanson, 2001). Jung *et al.* (2004) claimed leadership style can significantly impact organizational creativity and innovative ability. The leadership styles can be transactional, transformational, and moral (Burns, 1978), democratic, authoritarian, and *laissez-faire* (Razik & Swanson, 2001). Leadership styles can also be bureaucratic, nurturing, task-oriented, authoritarian, and participative (Sinha, 1990).

Apart from the weaknesses and barriers, these different styles of leadership become deliberative resources (Young, 2000) in the organization and not hindrances. Every organization has its own purposes, settings and uniqueness. As a result, they have their own matching styles of leadership. Deliberative processes in this context promote just policies and decision making in the organization. Dialectically, Young (2000, p.29) stated that:

if all significantly affected by problems and their solutions are included in the discussion and decision-making on the basis of equality and non-domination, and where people are accountable to one another, then the results of their discussion is likely to be the most wise and just.

In the case of Bangwita, there are a number of leadership styles which individuals in the organization have practiced, such as transactional, participative, bureaucratic, task-oriented, delegating, collective and transformational leadership.

2.1.2 The Roles of Leadership

Leadership has the central role in the management process in the organization. Based on their investigation and reflection on previous studies and the literature, Jung *et al.* (2004) developed a theoretical framework of leadership roles, especially transformational leadership roles as the organizational creation of innovation and empowerment. This framework is based on their hypothesis that transformational leadership is positively related to organizational innovation and empowerment (Jung *et al.*, 2004).

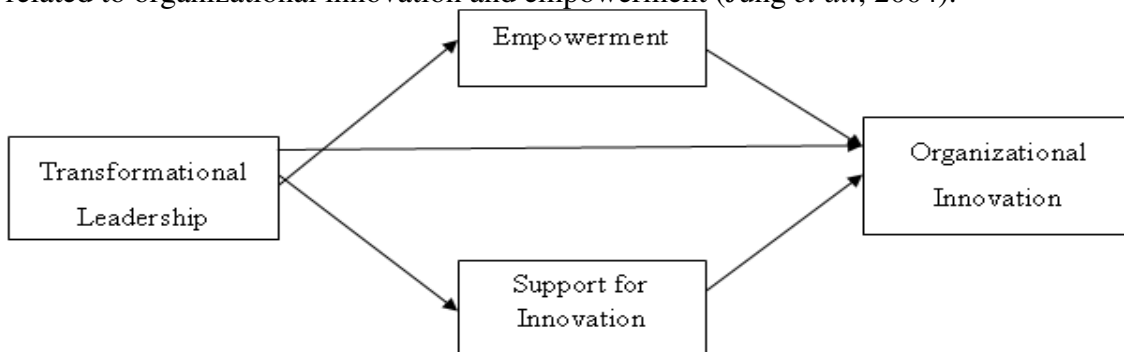


Figure 2.1: The Theoretical framework of transformational leader's roles (Adapted from Jung *et al.* (2004, p.12).

Hopkins (2003) noted several leadership roles and behaviors, such as the leaders creating vision and keep it, lobbying, network building, initiating and motivating. Moreover, the leaders encouraged the followers in achieving the organization's vision and mission, and to develop the innovative capacities of the organization. Transformational leaders motivate their followers to perform beyond expectations by activating followers' higher order needs, fostering a climate of trust, and including followers to transcend self-interest for the sake of the organization (Lagomarsino & Cardona, 2003).

Transformational leaders influence their followers by broadening and evaluating their goals, inspiring them with the confidence to perform beyond the expectations specified in the implicit or explicit exchange agreement (Dvir *et al.*, 2002). Leaders enable people to contribute, solve problems, learn from and experience, and accumulate invisible assets. Carnall (2003, p.147) stated that leaders empower their organizations to create an environment where people feel significant, where learning and competence matter, where there is team spirit, flexibility and excitement. Thus, the successful leader must bring wide experience and varied knowledge to the task of leadership (Carnall, 2003). The next section elaborates the theories of knowledge management.

2.2 The Theories of Knowledge Management: A Critical Review

2.2.1 The Nature of Knowledge Management

The terminology of knowledge management was introduced in the 1980s (Wiig, 2000). Knowledge management is rooted in many principles. For example, it comes from a

philosophical view to understand the role and nature of knowledge. It emerged from concrete concerns in the organizations (Wiig, 2000) by understanding “the very nature of knowledge, how it is generated and created, how it is represented and structured, and how it is accessed and utilized were seen as fundamental to effective knowledge management” (Todd & Southon, 2000, p.142).

Alavi and Leidner (1999, p.1) defined knowledge management as “a systematic and organizationally specified process for acquiring, organizing, and communicating both tacit and explicit knowledge of employees so that other employees may make use of it to be more effective and productive in their work”. Implicitly, this definition depicted the strategic goals of knowledge management, where knowledge management is a strategic direction for the organization and its members to achieve their strategic objectives. However, the authors did not include the other elements in the organization, excluding employees, such as management, leadership and other stakeholders in the organization involved in the process of knowledge management. Although it is true that the author elaborated knowledge management as a systematic process, predictably it demonstrated the active perspective of knowledge management; rather than knowledge management only as a passive activity.

Knowledge management in the context of Bangwita includes tacit and explicit knowledge. Knowledge management is a form of expertise management which draws out tacit knowledge making it accessible for specific purposes to improve the performance of the organization (Broadbent, 1997). The tacit knowledge is embedded and embodied in every individual of the organization (Nonaka & Takeuchi, 1995). The explicit knowledge is represented in the forms of program activities, documents, library, project proposals, organizational plans and meetings (Rusanow, 2007). Therefore, in order to remain competitive, the organization has to embrace knowledge management simultaneously and continuously.

2.2.2 Knowledge Management as a Process

Knowledge management as a process acknowledges and comprehends a set of activities, programs, capabilities and initiatives. The knowledge management process includes a wide range of acquiring, auditing, storage, utilization and diffusion of knowledge (Todd & Southon, 2000; Wiig, 2000). The process of knowledge management is active, dynamic, productive and innovative (McInerney, 2002; Zack, 2002). The dynamic aspects entail a strategic perspective of knowledge management.

Knowledge is a precondition of learning in the organization. Knowledge is “a collection of processes that allow learning to occur and knowing to be internalized”, (McInerney, 2002). Consequently, knowledge is not just a concept by human beings. If knowledge is a process, it can transform tacit knowledge to explicit knowledge, allowing others in the organization to use it for decision making and policy design (Broadbent, 1997; Nonaka & Takeuchi, 1995). As a process “knowledge management effectively engages and utilizes human competencies, experiences, expertise, skills, talents, thoughts, ideas, intuitions, commitments, innovations, practices, and imaginations and integrates them into the information resources an organization uses to achieve its goals”, (Todd & Southon, 2000, p.148). Therefore, knowledge management contains a wide array of interaction processes dealing with knowledge.

2.2.3 The key features of Knowledge Management

In order to understand and sustain knowledge management in the organization, it is important to consider its key principles. This study looks at three principles of knowledge management in the organization: contextual, holistic and problem-solving. These principles are reflected and examined as *sine qua non* (conducive environment) for an effective knowledge management in the organization.

Contextual – Knowledge management has the tacit dimensions and every organization has the uniqueness. As a result, knowledge management practices should be put in context, in the sense that knowledge management practices need to be articulated according to the context of the organization and the community. Reasonably, “knowledge is created in context, knowledge is context sensitive [and] the user must be able to know the context under which the [knowledge] artifact was created”, (Desouza & Awawu, 2005, p.767). This implies transferring and contextualizing knowledge management practices in the organization (Lehr & Rice, 2002). Knowledge management becomes

less confusing when we understand that the multiple definitions are relative to the context, in which they are used, most notably the disciplinary influences of the people implementing knowledge management and the organizations in which it is implemented, (Wick, 2000, p. 515).

Holistic – in this context, holistic means managing knowledge comprehensively in the organization. Holistic knowledge management includes tacit and explicit knowledge (Nonaka & Takeuchi, 1995), codification and personalization (Hansen *et al.*, 1999; Zack, 2002). This also means integration between people and technology (Davenport, 1998; Rusanow, 2007), knowledge acquisition, audit, utilization and diffusion (Rusanow, 2007; Zack, 1999), analytical/theoretical and practical knowledge management (Lehr & Rice, 2002). Holistic knowledge management is to integrate it with familiar aspects of the business: strategy, process, culture, behavior (Davenport & Prusak, 1998). What is needed in this knowledge era is a much more holistic approach to knowledge management. Bell (2003, p.99) suggested, “The emphasis will be on holistic policies that focus on integration rather than fragmentation, recognize that the sum is greater than the parts”. Knowledge management, therefore, should be long-term and holistic, in order to remain competitive.

Problem-solving – the most fundamental purpose of knowledge management is for problem-solving. Successful knowledge management strategy and initiative in the organization emerge with specific organizational problems, which the organization is trying to solve (Gordon, 2005). For example, in the case of Bangwita, knowledge management initiatives are emerging based on the problems of knowledge dispersal, lack of codifying and knowledge sharing. That is why Bickerstaff, as quoted in Gordon (2005, p.18), highlights knowledge management has to be perceived as a business problem solver, not as an abstract concept. Of this, it is important to maximize the significance of knowledge management as a problem-solving tool in the organization and the community, then, in turn, it can impact on a just and balance policy and decision making design. The next section explores the theoretical framework of sustainability.

2.3 The Theories of Sustainability

Sustainability is one of the key issues to which much more attention has been paid over the last two decades. The main challenge of the organization-based knowledge is the issue of sustainability (Stoll & Earl, 2001). Therefore, sustainability has become a competitive issue in the organization and society (Gilding, 2000). The challenge underlying this study is how to sustain and retain knowledge management in the organization.

The notion of sustainability is always defined in relation to development and environment. Practitioners defined sustainability development as “development that meets the needs of the present without compromising the ability of future generations to meet their needs”, (WCED, 1987). Meanwhile, Diesendorf (2000) conceptualized sustainability development as a type of economic and social development that protects and enhances the natural environment and social equity. Dunphy and Benveniste (2000) expand sustainability as a focus for a new value debate about the shape of the future.

Sustainability is related to the long-term goals and performance of the organization. Sustainability is the outcome of the productive life of organizations and maintains high levels of corporate performance (Dunphy & Benveniste, 2000). Sustainability in this context has an interrelation with organization, management and leadership. However, the most critical issue is what is the relationship between sustainability and knowledge management. Gilding (2000) made a good point in relation to the interrelationship between sustainability and managing knowledge in the organization. Gilding (2000, p.44) highlighted:

We are in transition to a new economy, a knowledge economy. Knowledge becomes king. This can be either knowledge that is commercialized into intellectual property based products, or knowledge that is business process focused, such as how a mining company can effectively operate in a developing country. People in many cases stop becoming cost centers and start becoming knowledge assets.

2.4 The Theories of Organization

Realizing the social aspect, human beings need organizations that underpin the well-being of the members and to support them to achieve the common goals. Drawing on the theoretical basis, the organization has several components in order to achieve these common strategic goals. These components are structures, leadership, management, power coalitions, common goals, and design (Robbins & Barnwell, 1994; Mendonca & Kanungo, 2007). An organization is an integrated knowledge system and the management of the organization is concerned with the effective use of that knowledge (Todd & Southon, 2000).

Organizations have the capacity to design and construct the structure. Through this structure, the organizational communities are allocated and designated a different task, role, and status levels in order to achieve efficiently and effectively the common purposes. Organizational structure implies that there are leaders and followers. The leaders are expected to provide direction, exercise control, and generally execute such

functions that are necessary to achieve the organizational objectives. The structures, mechanisms, norms and activity in the organization are to support the sustainability of the organization (Mendonca & Kanungo, 2007), including the sustainability of knowledge management.

This analysis is based on the conceptual basis of the organization. Robbins and Barnwell (1994, p.4) conceptualized an organization as “a consciously co-ordinated social entity, with a relatively identifiable boundary, that functions on a relatively continuous basis to achieve a common goal or set of goals. This definition has a wide array of critical elements. Firstly, *consciously co-ordinated* is not only leading to management, but also to leadership and members of the organization. *Social entity* implies that there are effective and constructive interactions between members in the organization (Robbins & Barnwell, 1994).

Another element is *relatively identifiable boundary*. This means that the organization has a clear procedure and mechanism for defining membership. The validation of this boundary is through job contract and job description (Robbins & Barnwell, 1994). The next element is *continuing bond*. Reflecting on the social aspect of the organization, it is important to build a close relationship and also keep in touch, even though the staff members may have left the organization. Finally, the organization has the *common goals*. These goals are the strategic direction for the organizational members and leaders, and the articulation of the organization mission (Robbins & Barnwell, 1994).

However, the organization needs to re-conceptualize the notion of organization in today’s knowledge and knowledge management movements. The most innovative aspect of the knowledge-based approach is the re-conceptualization of the organization as knowledge architecture, knowledge-based organization (Patriotta, 2003; Stoll & Earl, 2001). Prahalad and Hamel (1990) illustrated the organization as a large knowledge tree. This knowledge tree articulated according to a series of end products, business units, core products, and core competencies. Each is reflecting in a more in-depth way the distinctive body of knowledge of an organization. Then, the ideal organization is a good place to work, a good place to share ideas, experience and knowledge (Infante, 1989) and continually managing knowledge. He claimed (1989, p.104):

A good place to work is one which engages the whole person – his or her thoughts, feelings, and, yes, even aspirations. It is a place which values diversity, and sees people’s uniqueness as the seed of new ideas and possibilities. A good place to work is where people feel at ease collaborating cross-functionally and feel empowered to make decisions that are right for the organization.

3. Knowledge Management Practices and the Proposed Framework of Knowledge Management Process in Bangwita

Those organizations that invest in developing the specific knowledge and skills of their employees and the general capability to learn, those that provide opportunities and space for interaction and share learning, those that emphasize effective communication and sharing of information, those that

recognize and reward learning behavior - these are likely to be the organizations that succeed in developing into the kind of learning organization that is much talked about but hard to achieve.

(Bessant, 2003, pp. 6-7)

3.1 Historical Perspectives of KM Practices in Bangwita

Knowledge management practices in Bangwita originated from a deep concern and awareness of the importance of knowledge. Bangwita had a severe experience when planning to conduct training; in fact some tools of training have dispersed. As a consequence, Bangwita had to start from nothing. Undoubtedly, this consumes time, costs, and energy (Bangwita, 2003). These problems motivated Bangwita to managing knowledge effectively and efficiently in a sustainable way.

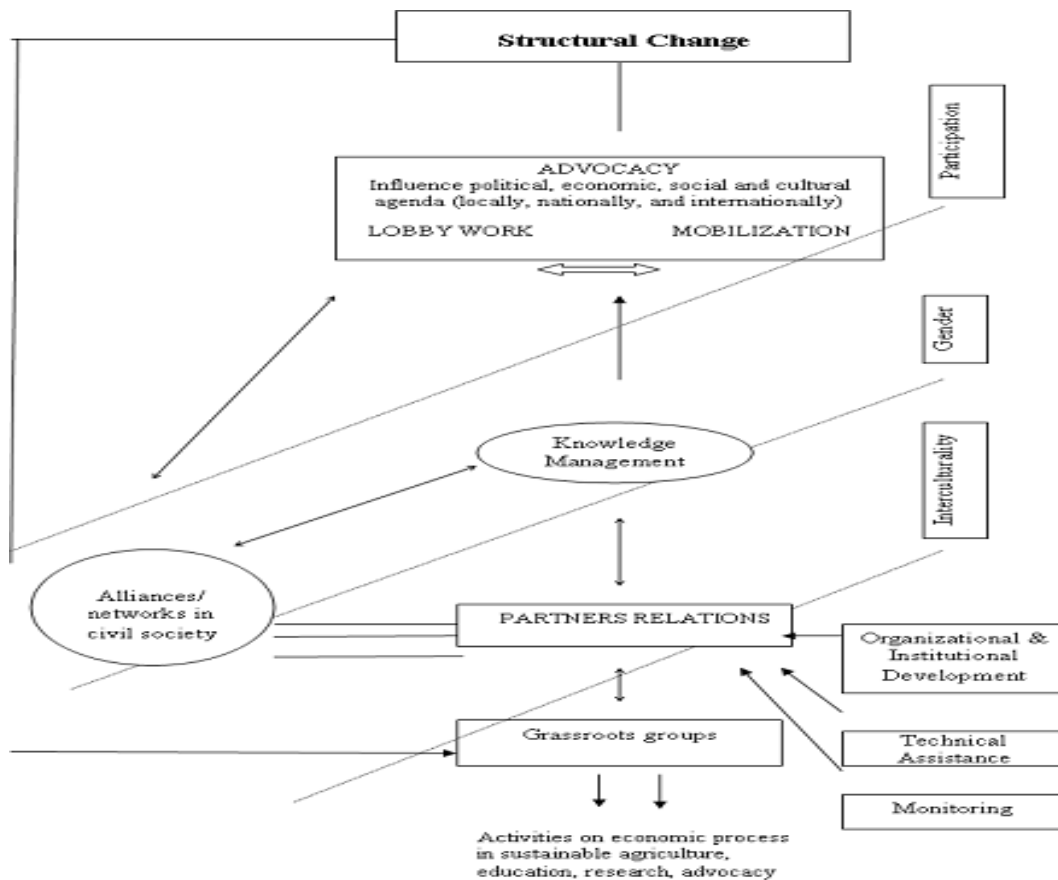


Figure 3.1: The Centrality of Knowledge Management in Organization (Adapted from Van Wichelen, 2003; Schueber, 2005, p. 12).

Additionally, knowledge invention in Bangwita is achieved through collaboration and network building with other development agents. In this collaboration and networking process, learning and knowledge sharing and diffusion happen. The most effective collaboration and networking is with Vredesailanden Country Office (VECO) – Indonesia. VECO introduces the centrality of knowledge management in the organization

to NGO partners in Indonesia. Figure 3.1 shows the centrality of knowledge management in the organization. Consequently, NGOs' partners have tried to make some adjustment in terms of putting knowledge management in place centrally in the organization. VECO and NGOs' partners are aware of and realize for what and for whom knowledge is applied. This is called 'knowledge management', (Van Wichelen, 2003). Given these considerations, VECO and NGOs' partners are hoping to become 'learning organizations', where learning becomes the spirit of the organization (Van Wichelen, 2003).

The main role of VECO is to facilitate technical enhancement, such as LEISA (Low External Inputs and Sustainable Agriculture) technology development and CBED (Community Based Economy Development). So, VECO assumes, that if it is successful in designing a balanced alliance of NGOs' partners based on mutual respect and trust in SOM (*Strategic Orientation Model*) perspectives (*Figure 3.1*), then it is possible to build a strong network with NGOs' partners and expand the alliance with other NGOs non-VECO partners in Indonesia. Moreover, if VECO and NGOs' partners work with a future-orientation, then VECO and NGOs' partners should document and manage experiences and knowledge, which in turn can give added value and meaning to the organizations.

Moreover, mobilization is the empowerment processes at the local communities' level, through which, they are able to perform collaborative, constructive and productive acts. These mobilization processes should be beyond the organizational boundaries, which can expand to become a wider movement. The tools for mobilization processes are:

- *Advocacy*. Advocacy is not limited to advocate individual rights, but more it is to advocate collective or common rights, through real actions and involves journalism, media and other stakeholders. In addition, advocacy is influencing political, economic, social and cultural agendas, locally, nationally and internationally (Pers. Com., 2006; Schueber, 2005; Van Wichelen, 2003).
- *Lobbying*. Lobbying influences socio-political agenda, which can be proposed to the local government, entrepreneurs and/or other NGOs, whether local, regional or international (Pers. Com., 2006; Schueber, 2005; Van Wichelen, 2003).

Based on the organizational history, there have been two 'driving forces' influencing the implementation of knowledge management in Bangwita. These driving forces are internal and external forces (Wiig, 2000). The internal forces are derived by the deepest awareness of the importance of knowledge management in the organization. Another internal force is the diversity of staff's educational backgrounds, with different perspectives of knowledge. Therefore, Bangwita needs to manage this knowledge in order that they become valuable organizational assets. The external aspects of knowledge management are the demands of the growing process of globalization (Wiig, 2000), information and communication technology (Fuller, 2002) and the productive collaboration and networking with other stakeholders.

3. The Present Situation of KM Practices in Bangwita

Based on the historical and philosophical grounds of knowledge management, Bangwita has initiated knowledge management practices within the organization. There are two

strategies of knowledge management in the organization. These are codification and personalization. Ideally, the codification strategy of knowledge management centers on the computers, where knowledge is carefully codified and stored in databases, where it can be accessed and used by anyone in the organization (Hansen *et al.*, 1999).

However, in the context of Bangwita, codified knowledge is mostly in the form of documents, such as program and activities reports (three monthly, mid-term and annual), brochures, bulletins, CD/Video programs, photos of program activities, articles (Sogen, 2004), organizational profile, procedures, regulations, mechanisms, and the structure and culture of the organization (Bangwita, 2002). The amounts of computer data are limited. The reason is because there are only a few computer facilities and few staff can access computers. The substance of the reports, whether monthly, every three months, six month or annual, are the elaborations of program activities, its successes and failures, the involvement of stakeholders, and finally explorations of the lesson learned, challenges and proposals of some prospective strategies for the next planning.

In terms of the personalization strategy of knowledge management, Bangwita applied direct person-to-person contacts (Hansen *et al.*, 1999). The medium of personalization strategy in Bangwita is not through computers, but through meetings and communities of practice. These meetings take place every two weeks, monthly, three monthly, mid-terms, and annually. The main purpose of these meetings is to evaluate the implementation of the program activities and plan for the next period. These meetings engaged staff, community representations, NGOs' partners, representations of the local government and other stakeholders.

The other medium of personalization of knowledge management is through communities of practice (Saint-Onge & Wallace, 2003). The real community of practice in Bangwita is a collective revolving unit. This Collective Revolving Unit takes place monthly and the place is rolling from one staff to another. This is not only for collecting money and revolving between staff, but this event also shares knowledge, experiences and has an impact on the local community as lessons learned.

3.4 The Proposed model of KM Process for Bangwita

As a reflection and crystallization of the present practice of knowledge management in Bangwita, this study proposes an ideal model of knowledge management process for Bangwita to articulate in the future (*Figure 3.2*). This model is as a representation of how Bangwita acquires knowledge and how knowledge is removed. This is not necessarily in a linear way of thinking, from right to the left, but rather circular. Knowledge can be acquired from many angles within the organization. For example, the free space on the model represents an environment where the knowledge is, especially the tacit knowledge. The sign (#) in the model symbolizes a filter, where the knowledge acquired is validated.

3.4.1 Sources of Knowledge

The sources of knowledge or knowledge acquisition can be categorized into two – internal and external. Knowledge acquisition means the development or creation of skills, insights, relationships, whether internally or externally (Nevis *et al.*, 2000). Lave (1993) suggested, acquisition of knowledge is not a simple matter of taking in knowledge; rather, things assumed to be natural categories, such as 'bodies of knowledge', 'learners',

and ‘cultural transmission’, require re-conceptualization as cultural, social products. Based on this theoretical basis, Bangwita has five major sources of knowledge.

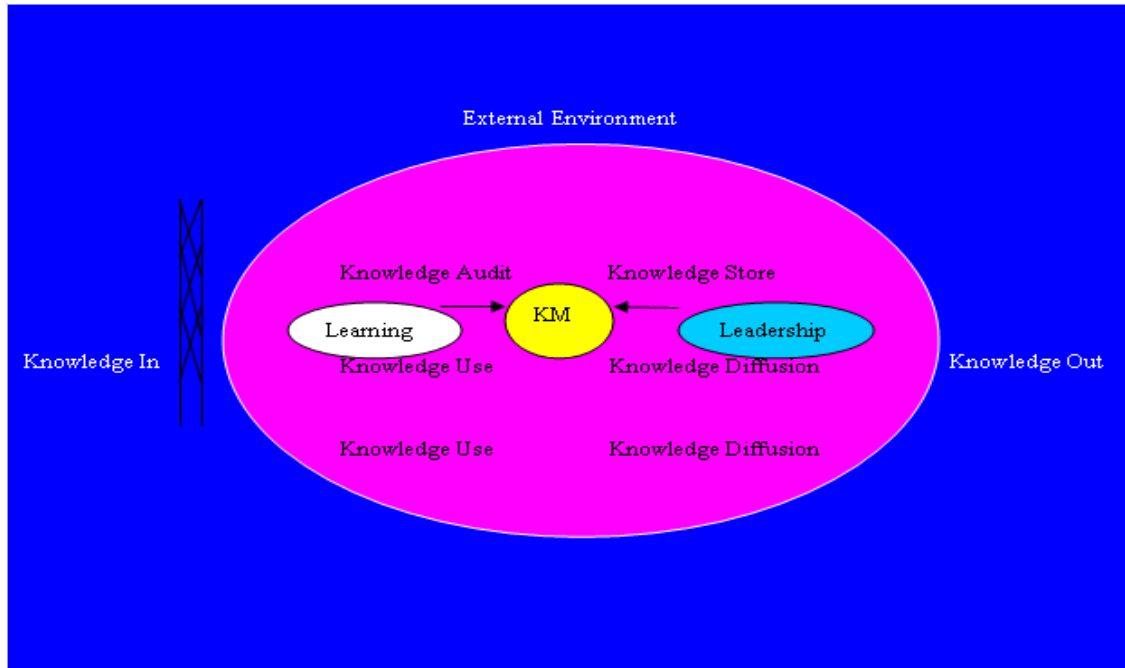


Figure 3.2 KM Process for Bangwita (source: Author)

3.4.1.1 Knowledge Organization

The notion of the knowledge organization is explicitly underpinned by the assumption that at the beginning the organization has prior knowledge. The founders, boards, controlling sections, executives have previous knowledge. Byham *et al.*, (2002, p.356) viewed the knowledge organization as “the degree of understanding that senior managers must have about how the organization operates. Include areas such as functions, process, systems, and products and services”. Liebowitz and Beckman (1998) defined knowledge organization as an entity that realizes the importance of its knowledge, internal and external to the organization, and applies techniques to maximize the use of this knowledge to its employees, stakeholders, and customers.

Tsoukas and Vladimirou (2001, p.973) conceptualized knowledge organization as

the capability members of an organization have developed to draw distinctions in the process of carrying out their work, in particular concrete contexts, by enacting sets of generalizations whose application depends on historically evolved collective understandings.

However, this study proposes the knowledge organization as acquiring tacit and explicit knowledge the organization has through learning, interactions, and through the process of carrying out program activities in the community and at the organizational levels.

Knowledge is a valuable asset and source of competitive advantage of the organization. At this point, the organization is as a body of knowledge, focusing on turning its ability to create, manage and transfer knowledge as a determinant of competitive performance (Patriotta, 2003). However, the current debate on knowledge organizations has highlighted the difficulty of documenting empirically the process of creation, accumulation, and maintenance of knowledge in the organization (Patriotta, 2003).

3.4.1.2 Staff Knowledge-Based

As has been indicated in Section One, Bangwita has staff with different educational backgrounds. As a result, Bangwita is potentially rich in staff-based knowledge. Wiig (2000, p.25) suggested “people are the intelligent agents that create and act on new opportunities”. However, the organization needs to empower the staff with new skills, knowledge and encourage new attitudes. Bessant (2003, pp.6-7) observed that:

Those organizations that invests in developing the specific knowledge and skills of their employees and the general capability to learn, those that provide opportunities and space for interaction and share learning, those that emphasize effective communication and sharing of information, those that recognize and reward learning behavior – these are likely to be the organizations that succeed in developing into the kind of learning organization that is much talked about but hard to achieve.

Knowledge is created through the interactions among individuals or between individuals and the environment (Brannback, 2003). In this sense, people really are the organization’s most valuable assets. People actually do represent the powerhouse for learning. Without actively committed and focused learning, any organization is likely to stagnate and will struggle to create the steady stream of change it needs to survive. Investments in assets like buildings, equipment or IT systems may help the business or the organization, but without a core learning capability the long-term future will be uncertain (Bessant, 2003).

3.4.1.3 Knowledge Community

Bangwita is a community-based organization. Bangwita has learned much from the community. The community is not simply a passive recipient or the object of the program activities, however, they are the subject of the program activities. They have indigenous knowledge and ecological knowledge (Pawson *et al.*, 2003; Brown, 2005; Rocha, 2005). The ecological knowledge “reflects not only something that is organically living and growing but also the generation of innovation through the cross-fertilization of ideas. It has all kinds of dynamic interactive capacities”, (Brown, 2005, p.83).

Thinking in terms of systems and ecologies can help provide for the creation of platforms and culture where knowledge can freely emerge (Nonaka & Konno, 1998). Barabas (1990) emphasized there is no universal foundation for knowledge, only the agreement and consensus of the community. Knowledge, whether scientific or not is rooted in the community. Knowledge also originates with individuals and becomes group and organizational knowledge as a result of knowledge community or local collective knowledge (Schwen *et al.*, 1998; Baumard, 1999).

3.4.1.4 Program Activities-Based Knowledge

Bangwita also acquires knowledge through program activities. These knowledge-based activities are networking, secondment, research, experiment, training, workshop, seminar and meetings. Through these program activities Bangwita acquires new knowledge, skills and modifying attitudes (Patriotta, 2003). Training, for example, is an investment that the organization designs. Jones (1994) conceptualized training as a planned process to modify attitudes, knowledge or skill behavior through learning experience to achieve effective performance in an activity or range of activities. Its purpose, in the work situation, is to develop the abilities of the individual and to satisfy the current and future manpower needs of the organization. This study argues that knowledge-based program activities are knowledge that is acquired through and integrated with the program activities of the organization.

3.4.1.5 Knowledge experts

As indicated in the structure of the organization (*Figure 1.1*), experts are also giving input to Bangwita technically and strategically. The strategic program activities of Bangwita are on sustainable and integrated agriculture, environment, advocacy and education. Thus, the technical input, for example, is agricultural techniques on how to grow crops, technical input of environmental conservation and maintenance, techniques of advocacy and educational delivery. The strategic input is, for example, in relation to the nature and philosophy of the mentioned program activities, for example, the strategy of advocacy, empowerment and educational awareness. However, experts' knowledge has a tacit dimension (Fuller, 2002; Polanyi, 1966). Therefore, the organization needs to manage this tacit dimension in order to maximize the organization's performance. These sources of knowledge acquired through learning are internalized as assets or intellectual capital for the organization.

3.4.2 Knowledge audit

A knowledge audit is inevitable as part of a knowledge management strategy. It must be put in place at the first stage of knowledge management initiatives. However, on the practical level, it is often neglected (Hylton, 2002). A knowledge audit is important to justify and validate whether the knowledge acquired is qualified or not, and in turn, whether it can be used, shared, or stored in the organization (Henrie & Hedgepeth, 2003). In spite of this, knowledge audit is not just the first stage of the knowledge management initiatives, but should continue throughout the process of knowledge management in the organization. Knowledge audit is an effective tool in order to assess knowledge and learning strategies in the organization (Ramalingam, 2005).

3.4.3 Knowledge Utilization

The validated knowledge provided through audit is imperative to use in the organization. Knowledge utilization means the integration of learning so it is broadly available and can be generalized to new situations (Nevis *et al.*, 2000). Knowledge utilization is the process of articulating and applying the acquired and validated knowledge in influencing decision-making, policy design, problem-solving or create new solutions for human needs. It takes advantage of new opportunities and it creates new knowledge (Drucker,

1991). Knowledge always undergoes construction, transformation and retention in use and action (Lave, 1993; O'Toole, 2004a).

3.4.4 Knowledge Storage

The acquired and validated knowledge need to be stored, in order to protect from loss. There are strategies to store knowledge. For example, it can through documents or technology. Technology provides means of storing and retrieving knowledge through computerization (Swan & Newell, 2000). This is important, so that others can access the same knowledge. However, the organization must do more than accrue and store knowledge in order to improve their profitability and effectiveness (Henrie & Hedgepeth, 2003).

3.4.5 Knowledge Sharing

Most studies of organizational learning have been concerned with the acquisition of knowledge and, to a lesser extent, with sharing or dissemination of the acquired knowledge or knowledge transfer. Less is known about the assimilation process, the stage in which knowledge becomes institutionally available, as opposed to being the property of select individuals or groups (Nevis *et al.*, 2000). Therefore, the organization should efficiently transfer this knowledge throughout the organization.

However, the recent studies have rejected transfer models which isolate knowledge from practice and emphasized the social, situated nature of the learning experience. The main claim of situated learning theories is that knowledge is embodied and embedded in praxis – action and reflection (Freire, 1996). Patriotta (2003) emphasized, rather than being a passive recipient, the community of learners is constantly engaged in sense-making and interpretation activities whereby knowledge is appropriated out of a wide range of materials. So the focus is not how knowledge is transferred but mainly on how that knowledge is understood and internalized and in turn, how it creates the new knowledge and solves problems. Therefore, the organization needs the new culture that supports learning and knowledge sharing in the organization (Swan & Newell, 2000).

3.4.6 Knowledge Out

In order to maximize the use of knowledge, the organization tries to audit knowledge internally and externally. In the process of audit, the organization is being selective, which knowledge should be removed and which knowledge could be used. In a world where access to information is fast and widespread, those organizations which can create and use their own knowledge are likely to be able to build and sustain competitive advantage. Thus, the organization needs to become good at learning – and occasionally forgetting or letting go of knowledge that they no longer need (Bessant, 2003).

3.4.7 Learning

Learning in this study is as a channel, where knowledge is acquired. Knowledge is acquired through learning, learning from the organization, experts, program activities, other staff and stakeholders. Learning is “the central process promoting openness, communication, trust and the shape of decision rules where it is inclusive, accessible and based on reliable knowledge” (Cooke, 2002, p.85). Learning is profoundly socially interactive and is constructed understanding (Cooke, 2002; Blackler, 1995). Trust is a fundamental requirement and, if successful, an outcome of the learning process (Cooke,

2002). The organization needs to provide the environment and culture in which individual learning can take place. In the end learning is essentially a human process involving individuals and groups in different configurations and the outcomes of learning are new knowledge and innovations (Bessant, 2003).

3.4.8 Knowledge Management

In the proposed model (*Figure 3.2*) knowledge management becomes the central feature of the organization. Knowledge management is the movement of knowledge acquisition, validation, diffusion, storage, utilization and learning processes (Pederson & Larson, 2001; Patriotta, 2003). Knowledge management becomes a strategic solution and effectively engages and utilizes human competencies, experiences, expertise, skills, talents, thoughts, ideas, intuition, commitment, innovations, practices, and imagination and integrates them into the information resources the organization uses to achieve its strategic goals (Todd & Southon, 2000). Therefore, Bangwita should embrace knowledge management as a strategy in implementing the organizational philosophy and operations.

3.4.9 Leadership

In this context, leadership has the important role of creating and providing the organizational climate, so that knowledge acquiring, audit, utilization and diffusion, and knowledge management can be carried out effectively. Strategic leadership is seen as a key element in effective strategic management (Joyce, 1999) of the organization. The reason is “once an unambiguous vision of the future and clear principles have been set out, a sequenced set of strategies, priorities and tactics can be established to attain them”, (Doppelt, 2003, p.131).

Nonaka and Konno (1998) stated that knowledge is manageable only insofar as leaders embrace and foster the dynamic of knowledge creation. The role of top management is as the providers of *ba* or space for knowledge creation. Their task is to manage for knowledge emergence. Leaders must support emerging processes with visionary proposals and a personal commitment of time and power. Managing emergent knowledge in *ba* requires a different sort of leadership. Top management must come to the realization that knowledge needs to be nurtured, supported, and cared for.

3.5 The Proposed Organizational Structure

This study also proposes a new structure to be applied by Bangwita in the future (*Figure 3.3*). This is as a result of being aware of the organization as a learning organization and knowledge sharing. A reflection on the present situation of knowledge management strategy in Bangwita indicates there is no special division for knowledge management in the organizational structure. Moreover, this is to make sure there is a structural perspective of knowledge management strategy and initiative in the organization. However, by just incorporating knowledge management within the structure of the organization does not automatically guarantee its success. It needs a long-term process, integrating it into strategic program activities.

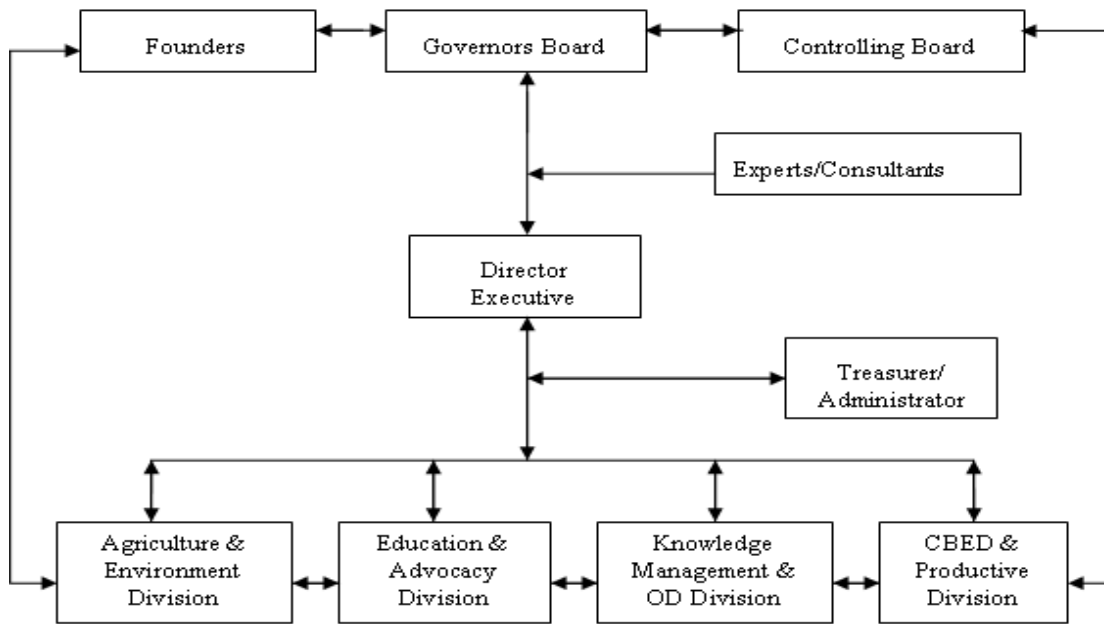


Figure 3.3: An Ideal Organizational Structure

However, by reflecting on the centrality of knowledge management in the organization, this study proposes a new organizational structure (*Figure 3.3*), where knowledge management is accommodated in a special division along with the organizational development or learning organization. Although this does not mean that knowledge management is separated from a wide range of organizational operations, on the other hand, knowledge management becomes an inseparable element from the organizational operations.

Essentially, organizational structure is valuable and meaningful. Drucker (1998) emphasized that as far as the organization is a tool for making people productive in working together, so also the organizational structure fits certain tasks in certain conditions and at certain times. The staff should be aware and understand the organizational structure they are to work in. This means that the staff can work in teams as well as working in their own structure. For that reason, the organization needs trust and respect between the staff, so that knowledge sharing and learning can happen between different structures.

4. The Implications of Knowledge Management Sustainability for Leadership in the Organization

Knowledge management leaders must be able to argue the same points with multiple rhetorical and political approaches to meet varying context and the questions and objectives arising from executives from divergent backgrounds. This need will be especially felt by leaders attempting to champion an evolution beyond document-or technology-centered knowledge-management

approaches, since doing so will require the entire the organization to re-conceptualize what knowledge management means (Wick, 2000, p. 526).

4.1 Introduction

The theoretical and analytical framework of leadership and knowledge management has been discussed in Section Two. This Section analyzes both the strategies for sustaining knowledge management and the implications of knowledge management sustainability for leadership in the organization. This means to address the research questions. *First*, what are the strategies for sustaining knowledge management in the organization? *Second*, what are the implications of knowledge management sustainability for leadership in the organization? This Section explores these two issues from an integrated perspective. However, the first question has been introduced partly in Section Three.

4.2 The Strategies for Sustaining KM in the Organization

The main issues for Bangwita are knowledge loss and unsustainable knowledge management in the organization. Research in this area has proved knowledge loss and unsustainable knowledge management are key concerns in many organizations (Newman, 2003; Newell *et al.*, 2002). The discourse on knowledge management sustainability in the organization is considered new and untested (Prusak, 2001; Zack, 2002). However, Nonaka and Takeuchi (1995) laid a strong foundation for knowledge management practices in the organization by figuring out the cyclical conversion of tacit and explicit knowledge. In the process of interactions between employees in the organization and through social processes tacit knowledge becomes explicit, and in turn, accessible and available to all employees and other stakeholders in the organization (Nonaka & Takeuchi, 1995; Patriotta, 2003).

Another challenge of the organization-based knowledge is the issue of sustainability (Stoll & Earl, 2001). Problems of sustainability occur, in part, because of the limitations of the leadership skills and effectiveness (Hargreaves & Fink, 2000; Mehan *et al.*, 2003). Leadership cannot handle all aspects of management in the organization (Mintzberg, 2002). However, the terminology of sustainability has different interpretations in the organizations and society. Sustainability always relates to the social, environmental and economic implications and values in the society (Gilding, 2000). Thus, it is important to articulate a leadership style that “kept the organization focused on its long-term goal of becoming sustainable while encouraging employees to work together diligently toward that end”, (Doppelt, 2003, p.38).

The new understanding of knowledge management strategy in the organization emphasizes the need to adjust the present practices as well as the creation and application of new knowledge within new practices in the organization (Egan, 1998; Venters *et al.*, 2002). The co-modification of knowledge is suggesting a causal relationship between organizational knowledge and competitive performance, and an improvement of the way the organization manages knowledge (Patriotta, 2003). Therefore, the emergent awareness and reflection on knowledge management sustainability in the organization in this study is critical. These strategies will develop in the succeeding sections.

4.2.1 Integrating KM to Culture and Structure of the Organization

In order to remain sustainable, knowledge management in the organization needs to be integrated into the organizational cultures and structures. These cultures and structures are, for example, the culture of rewarding and incentive for the staff for practicing knowledge management in the organization. Another example is training and education development for the staff in relation to knowledge management practices in the organization (Davenport & Prusak, 1998). In addition, the leaders and the organization need to design an organizational structure that is flexible and flatter (Stacey, 2003). The purpose is for decentralizing decision making and control in project-based, network or web-like structures, such as self-managing teams (Stacey, 2003, p.165) in the organization.

Knowledge and knowledge management can also be retained in the organization in the form of individuals, contexts, mechanisms, rules, procedures and practices (Patriotta, 2003; Stacey, 2003). Knowledge and knowledge management can be embedded in documents, repositories, organizational routines, processes, and norms (Davenport & Prusak, 1998). As a consequence, knowledge retention and dissemination is indeed imperative in every organization. It has a great impact on organization as a learning organization (Huber, 1996; O'Toole, 2004b). As a process of learning, Bangwita determined that knowledge management is the central issue for the organization.

Bangwita implements a flat organizational structure (*Figure 1.1*). This allows knowledge sharing and learning to happen. Even though, few experts deny that the flat organizational structure and “high level of decentralized management has an embedded problem of coordination and overview, which is easier in hierarchical organizations”, (Monsted, 2003, p.9). However, this study would argue that the flat organizational structure is effective for coordination, sharing and learning.

4.2.2 Knowledge Management Investment

The new understanding of knowledge management sustainability in the organization is as an investment. If knowledge management is an investment, it becomes a long-term asset of the organization. Experts observed that one of the strategies of knowledge management sustainability is that the employees and other components in the organization invest their knowledge (Stewart, 1998; Kelloway & Barling, 2000).

Kelloway and Barling (2000) described that, like all investors, employees expect a return on their investment. The more attractive that return, the more likely individuals are to make the investment. Moreover, the attractiveness of a return on investment is predicted by two central features, that is risk and the rate of return. Investment risk is the trust of employees in the organization. Trust has two components; cognitive and affective (McAllister, 1995; Kelloway & Barling, 2000). The cognitive component reflects the belief that management is sufficiently skilled to justify the confidence of employees in their actions. The affective component reflects the belief that management will not do anything deliberately to harm employees (Kelloway & Barling, 2000).

Kelloway and Barling (2000) explored the “rate of return” on employees’ investment of knowledge in the organization which is reflected in employees’ sense of affective commitment to the organization. The affective commitment reflects employees’ pride in

their membership of the organization, their desire to be a part of the organization, and their willingness to retain membership of the organization. Affective commitment is based on a reciprocal and exchange-based relationship between the organization and the individual. However, the organization has to be aware that, on the one hand, it concentrates on managing knowledge in a sustainable way, on the other hand, the organization has also to be continuously learning and acquiring new knowledge in order to sustain competitive advantage (Zack, 2002).

Knowledge management implies a serious struggle to regain knowledge that is lost in the past and explores new opportunities to retain and sustain knowledge in the organization in the future (Caldwell, 2000; Newman, 2003). Knowledge management is the process by which the organization generates wealth from its intellectual or knowledge-based asset (Bukowitz & Williams, 1999). Therefore, knowledge and knowledge management have to be an investment in the organization.

4.2.3 Learning Organization

Senge (1992, p.3) defined learning organizations where “people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together”. Garvin (1993, p.80) described the learning organization as “an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights”. These definitions imply knowledge acquisition, sharing and diffusion in the organization (Maier *et al.*, 2001) and as a struggle for meaning (Freire, 1985).

In the process of learning, the organization attains new knowledge and at the same time shares and disseminates that knowledge to the other employees and other stakeholders. This new knowledge comes through “tapping the tacit knowledge located in individual heads and this process of tapping is understood as translating the tacit knowledge in individual heads into explicit forms”, (Stacey, 2003, p.163). At this point, knowledge and knowledge management provide the axiology, value added for the organization. Thus, the organization needs to create a systematic and holistic approach to sharing technical excellence and best practices to demonstrate added value and construct the uniqueness in the organization (Venters *et al.*, 2002).

However, the new challenge of today’s organizations is learning to learn together and to share knowledge. Brown (2005) suggested that knowledge sharing has to do with the exchange of stories and learning has to do with constructing new stories and hearing stories in new ways. Moreover, “the key challenge for leaders is how to enable teams to uncover layers of reality that will move them from one level of learning to another” (Stacey, 2003, p.171). Therefore, learning organization processes become one of the knowledge management sustainability tactics in the organization.

4.2.4 Knowledge Visualization

Knowledge visualization is one of the knowledge management strategies in the organization, because it stimulates the viewers to capture the meaning and create new knowledge. Practitioners have observed the effectiveness of knowledge visualization,

which leads to availability, accessibility, and ease of management (Eppler & Burkhard, 2005; Sparrow, 1998).

The main purpose of knowledge visualization is to make use of visual representations in improving knowledge creation, diffusion and management in the organization (Eppler & Burkhard, 2005). This supports an organization that mostly possesses knowledge which is complex, tacit, intuitive and rich (Davenport & Prusak, 1998; Winter, 1998). Knowledge visualization can be in the form of maps, cartographies, diagrams, metaphors, structures, pictures, model, spiral and storytelling (Eppler & Burkhard, 2005; Prusak, 2005).

4.2.5 Technological Solutions

The growing process of information technology in recent times inevitably penetrates every aspect of human life. One of these is that information technology facilitates the process of knowledge management in the organization. Information technology helps the process of connecting explicit knowledge from different sources into new systemized knowledge and allows a large number of people to participate in the process (Nonaka *et al.*, 2001). Therefore, in this context, information technology underpins the sustainability of knowledge management in the organization.

In the process of information technology operations, the tacit knowledge embodied in such tools and systems indicates the sustainability. However, if the implementation is based on tacit knowledge, the more difficult the system will be to transfer and the more uncertain and unsustainable the outcome will be (Nonaka *et al.*, 2001). At this stage, the

need will be especially felt by leaders attempting to champion an evolution beyond document-or technology-centered knowledge-management approaches, since doing so will require the entire the organization to re-conceptualize what knowledge management means', (Wick, 2000, p. 526).

A recent study of technology for knowledge management provided a theoretical basis for knowledge management solutions through information technology. For example, Alavi and Leidner (2001) emphasized that information technology systems are to develop support and enhance the organizational processes of knowledge creation, storage, retrieval, transfer and application. Linked to this, Stacey (2003, p.165) argued that the leaders and the organization have to “develop[ing] information technology so that knowledge held by individuals can be captured and so owned and controlled by organizations”. Reasonably, the investments in information technology lead to increasing returns only if they are combined with human-centered competencies (Arthur, 1996; Reinhardt *et al.*, 2001).

Another study shows that knowledge management initiatives have a high percentage of activities driven by information technology (Reinhardt *et al.*, 2001). Consequently, it is important to recognize and treat information technology as an important tool for knowledge management in the organization. A constant development of new capacities in information technology makes it possible for the leaders and the organizations to integrate and process large amounts of data. People exchange data, text, images, sharing their experiences quickly and inexpensively (Reinhardt *et al.*, 2001). Apart from

weaknesses, these strategies are effective in sustaining knowledge management in the organization.

4.3 The Implications of KM Sustainability for Leadership in the Organization

In recent years, there have been new challenges for leaders in managing knowledge in the organization. If these challenges are managed in a better way, knowledge management will become a deliberative resource (Young, 2000), a great potential in enriching and retaining knowledge management in the organization. Moreover, it will contribute to the well-being of the community and the society.

Nonaka and Konno (1998) observed that successful knowledge management occurs when leaders and leadership embrace and foster the dynamic of knowledge creation. In this context, the roles of the leaders and leadership are providing and enabling spaces for knowledge creation. Leaders must support emerging processes with visionary proposals and a personal commitment of time and power. The real supports of leaders and leadership on knowledge creation are things such as responsibility, justification, financial backing and caring. Therefore, managing emergent knowledge in the organization requires a different sort of leadership (Nonaka & Konno, 1998). It is very important to have leadership roles in every level of the organization, leadership at the core as well as at the periphery (Schueber, 2003) of the organization in influencing knowledge management sustainability. The next sections discuss the implications of knowledge management sustainability for leadership in the organization.

4.3.1 Vision and Mission Setting

Vision is one of the leadership characteristics in the organization. The leaders and leadership challenge the process, share an inspired vision, and enable others to act and model the way (Joyce, 1999; Hopkins, 2003). Vision and leadership become the key elements in the organization, where the vision provides the goals, whereas principles frame the path for the organization (Doppelt, 2003). The other directions relate to manufacturing new cultures and inspiring people through the visions of leaders so that the employees can share the knowledge and work toward achieving the inspiring vision (Stacey, 2003).

Leaders work together with employees to achieve the organization's goals, and relationship-oriented leaders concern themselves with people and maintaining positive relationships (Ray, 1999). While value-based leadership is enthusiastic, positive, encouraging, morale modeling, motive arousing, confidence building, dynamic, convincing, visionary, inspirational, decisive, and performance-oriented, it also needs high integrity (Smith & Peterson, 2002).

Leavy and Wilson (1994) suggested that the vision can be achieved by refocusing on the expressive perspective of leadership. Expressive perspectives are rooted in the interaction of leader, context and organizational history, where the organization can begin to get a better understanding of the wellsprings of strategic vision and inspirational leadership. This understanding drives the organization in decision making processes (Gilding, 2000). Therefore, leadership has great implications for vision designing and in influencing policy and decision making processes in the organization.

4.3.2 Creating the Culture and Structure of KM in the Organization

Organizational culture is experienced in how the organization feels to work in. Researches observed that 50 to 70 percent of the organizational culture can be traced to its leadership styles (Watkins, 2001; Lussier & Achua, 2004). As a result, to institutionalize sustainability in the organization, the leaders play a pivotal role in creating an advantageous culture and environment. To achieve this sustainability, the leaders must actively pursue the objective of changing the organization culture to one that values sustainability at every level of the organization (Lussier & Achua, 2004). Thus, leadership is required in a time of crisis, and also has a capacity for all to be committed to a common purpose and to work together (Caldwell, 2000) in a sustainable way.

The leaders create the culture of knowledge sharing in the organization and establishing structures and processes to bring the vision to realization, and monitor the outcomes of knowledge management in the organization (Nonaka & Konno, 1998; Caldwell, 2000). The successful leaders at each level of the organization will have a capacity to change the culture (Caldwell, 2000). Change the culture that is not underpinning knowledge sharing and management in the organization. At this point the cultural change toward sustainability requires leadership (Doppelt, 2003). Leaders provide a global product strategy, coordinating resources allocation and coordinating resources flows across cultures (Smith & Peterson, 2002). Leaders develop “a strategy-supportive culture, create an effective organizational structure, prepare budgets, develop and utilize information systems and link employee compensation to organizational performance,” (David, 2001, p.6).

4.3.3 Empowering

The organizational and human resource management development study characterizes leadership as playing an important role in empowering people (Joyce, 1999). Ideally, the leaders and leadership engage employees and other stakeholders in the organization in designing vision and mission. However, most leaders embraced the traditional model of organizational vision and mission formulation. This is one of the critiques of this study that the leaders have to be involved in all components of the organization to design the organizational vision and mission, so that they have the sense of ownership and responsibility.

One of the failures of program activities, including knowledge management and high turnover in the organization is the lack of sense of ownership and responsibility in employees. For example, Stacey (2003, p.165) observed that “writers on knowledge management seem much concerned with people leaving an organization and taking their implicit knowledge with them”. Therefore, the leaders and leadership must be concerned with the conversion of individual tacit knowledge into explicit form and the storing of that explicit knowledge in either centralized or distributed systems (Stacey, 2003), so that employees and other stakeholders in the organization can access it.

In addition, the emphasis on value-based leadership clearly liberates individuals from excessive command and control management. This combination sustains employee focus on all the knowledge that is most critical to the success of the organization (Graham & Pizzo, 1998). Leadership grows from the capacity to hold creative tension when people articulate a vision and tell the truth about the reality (Senge *et al.*, 2000). This implies

that every organization has many leaders because there are people at each level in the hierarchy who play critical roles in generating and sustaining creative activities (Hartle & Hobby, 2003). Lussier and Achua (2004, p.435) stated that “the challenge for organizational leaders is to recognize that each person can bring value and strengths to the workplace based on his or her own unique background”. Knowledge management initiatives involve the organization developing a deep capacity of its entire staff to be at the forefront of knowledge and skill in supporting the learning process (Caldwell, 2000).

4.3.4 Creating Knowledge Management System

An organization is acknowledged as a knowledge system (Stacey, 2003) and learning agent. As a result, the leaders and leadership should create an informed system in order to underpin knowledge management sustainability in the organization. Effective knowledge management can occur when knowledge is in a system (Koenemann *et al.*, 2000). If knowledge is dispersed, it is difficult to manage (Alvesson & Karreman, 2001). Knowledge management initiatives and activities should fit together as a system (Koenemann *et al.*, 2000). The roles of the leaders are to create the conditions that allow others to shift the place from which the system operates (Scharmer, 2000; Stacey, 2003).

Moreover, the organization today has a new understanding of management. Stacey (2003, p.165) highlighted that management is understood in systemic terms and the prescriptions related to design and operation of a system to ensure the quality of the learning process. On this point, knowledge management emphasizes the need for devising systems and procedures in order to create, encode, diffuse, and retain the knowledge that the organization produces in program activities (Patriotta, 2003) and integrates into a system. Integrating and synthesizing systems means providing a mechanism that supports self-organized conversion support and action-reflection units in order to capture the emergence of new meaning in changing contexts (Nonaka *et al.*, 2001).

4.3.5 Open to change

Building a new system of the organization requires transformational leaders who can raise the high level of group practices to its values and are able to create a common understanding and foster a willingness to change (Merry, 2003; Edmondson, 2004). Thus, transformational and inspirational leaders are socially daring and change seeking (Khatri *et al.*, 2002). Socially, skillful leaders possess high interpersonal skills, relate well with people, are good at building relationships, interact well at all levels in the organization, understand the needs of others, identify with their subordinates and are caring, flexible, and open to ideas (Khatri & Felker, 2004). Thus, leaders must be open-minded and responsive.

The organization needs new opportunities. These opportunities are to introduce change and propose the strategies to meet the strategic goals, vision and mission of the organization (Grieves, 2003). Without continually expanding knowledge and understanding it is difficult for organizations to learn how to overcome the many barriers (Doppelt, 2003). Leaders need the ability to analyze situations, mobilize commitment, and establish mechanisms, for change. Change becomes a learning process because it seeks to facilitate individual and organizational learning (Grieves, 2003).

5. Where to Go with Leadership and Knowledge Management Sustainability in the Organization

Understanding knowledge management, however, is less confusing when we understand that the multiple definitions are relative to the context, in which they are used, most notably the disciplinary influences of the people implementing knowledge management and the organizations in which it is implemented (Wick, 2000, p. 515).

5.1 Introduction

This study has been an analysis of the implications of knowledge management sustainability for leadership and strategies in managing knowledge in the organization. The theoretical framework of leadership and knowledge management has been outlined. The findings of the study indicated that rather than a set of characteristics, behaviors, and skills, leadership is an art, a process and relationship. As an art, leadership motivates, leads, influences and supports to work effectively and efficiently in order to achieve the organizational strategic goals. Likewise, leadership is a process and relationship. Leadership is a process of interaction between the leaders and the followers and other stakeholders for the realization of the common vision and mission. In this process of interaction, leaders play a central role as facilitators and at the same time, leaders empower the followers and the organization (Carnall, 2003). The leaders empower and facilitate the followers, in turn; they together solve the common problems (Gibbons *et al.*, 2000) and improve the performance of the organization and facilitate learning processes and knowledge management in the organization.

Knowledge management is also a process; a systematic process of knowledge acquisition, utilization, storage and diffusion. Skyrme (2003) emphasized knowledge management as the explicit and systematic management of vital knowledge and its associated processes of creating, gathering, organizing, diffusing, use, and exploitation. Knowledge management is a process of communicating both tacit and explicit knowledge between employees so that, in turn; they have the common perceptions and share that knowledge. This study suggests that knowledge management is a process of creating a common language in the organization and the community so that all employees and other stakeholders in the organization can understand and construct a new knowledge. At this point, the role of the leaders and leadership in the organization is imperative, especially in managing knowledge in a sustainable way.

The nature of leadership, leadership styles and roles has been outlined in Section Two. Sections Three and Four summarized knowledge management practices in Bangwita and the implications of knowledge management sustainability for leadership in the organization. This study bridged and balanced the theoretical and practical perspectives of leadership and knowledge management in the organization. Both theoretical and practical aspects are needed and cannot be exchanged (Gustavsen, 1996). Gustavsen (1996, p.94) emphasized more theory cannot fill the vacuum of a lack of experience and more experience cannot bring more order into an uninterpreted world. His argument shows that the theoretical and practical studies have the same significance. Both

theoretical and practical studies can contribute to the body of knowledge in general and the specific field of study.

In this Section, the study emphasizes some key points and synthesizes the findings from this study. The study has identified three aspects to be emphasized and synthesized in this Section: (a) Knowledge management and context, (b) Knowledge management process in the organization: a relationship and (c) deliberate strategies: Linking leadership and knowledge management sustainability in the organization.

5.2 Knowledge Management and Context

The main problem of knowledge management sustainability in the organization is the problem in the implementation process, as has been outlined in Section One. In the context of Bangwita, this problem is the result of: *first*, that knowledge is not put in the context of the organization. Most knowledge is possessed by individuals. Consequently, if the employees leave the organization, they take the knowledge with them.

Second is the limitation capacities and skills of leadership and staff in accessing knowledge and sources of knowledge. As a consequence, knowledge should be available contextually so that all employees and other stakeholders in the organization can access it. Ideally, knowledge management emphasizes the need for devising systems and procedures able to create, encode, diffuse, and retain the knowledge that the organization produces in the program activities implementation (Lanzara & Patriotta, 2001; Patriotta, 2003). It is also imperative to maintain the knowledge management systems in the organization. The objective of a knowledge management system is “to constantly seek new ways to integrate the disparate tools and technologies so that the user can effectively and efficiently use available knowledge”, (Desouza & Awawu, 2005, p.767).

Third is the problem of the tacit dimension of knowledge. Tacit knowledge cannot be diffused and transmitted easily in the organization. At this stage, the tacit knowledge should be structured or institutionalized so that, in turn; all components in the organization can access it. Patriotta (2003, p.10) suggested “a new emphasis should be placed on the dynamics of institutionalization of knowledge, that is, the process through which significant components of human knowledge and agency are inscribed and delegate to structures of signification”.

The main problem the organization has to face is how to translate tacit into explicit knowledge (Patriotta, 2003). Accordingly, the tacit knowledge should be turned into explicit and organizational knowledge in order to be accessible for other employees and other stakeholders in the organization. Knowledge must be spread around the organization and design structures, systems and behaviors to overcome these tendencies (Stacey, 2003). Therefore, leaders and staff should search for new opportunities to access knowledge and sources of knowledge.

5.3 Knowledge Management Process in the Organization: A Relationship

In Section Three the study has demonstrated the model of knowledge management process in Bangwita in order to be applied in the near future. Beyond this as a set of concepts and procedures, knowledge management process in the organization is a

relationship (*Figure 3.2*). This relationship is the relationship between acquisition, audit, utilization, sharing, storage and diffusion of knowledge. Knowledge management is a systematic process of knowledge acquisition, utilization, sharing, storage and diffusion.

In addition, knowledge management has a relationship with learning and leadership. Knowledge and its management are the outcomes of learning process in the organization. The results of these relationships are new changes, knowledge and innovation (Nonaka, 1991; Stacey, 2003). Put another way, changes happen in the way knowledge is analyzed, added to, and transmitted (Ma Rhea & Teasdale, 2000). Furthermore, leadership acts as a facilitator. Leadership facilitates the process of knowledge acquisition, audit, utilization, sharing, storage and diffusion. Leadership facilitates learning process in the organization. In the context of Bangwita, knowledge is acquired through organization, employees, experts, community, program activities and networking, as indicated in Section Three.

Finally, knowledge has a relationship with management. Drucker (1993) emphasized the relationship between knowledge and management. He stated (1993, p. 43) “if knowledge is an essential resource for establishing competitive advantage, then management obviously should attempt to identify, generate, deploy, and develop knowledge”. In this knowledge era, the organization needs a new management strategy. Today management strategy has shifted from management by command to management as dialogue (Savage, 1990). Therefore, the knowledge management process in the organization is a process of relationship and dialogue rather than an abstract concept.

5.4 Deliberate Strategies: Linking Leadership and Knowledge Management Sustainability in the Organization

This study demonstrated the strategies for sustaining knowledge management and the implications of knowledge management sustainability for leadership in the organization in Sections Three and Four. The study explored seven strategies in sustaining knowledge management in the organization. These strategies are codification, personalization, integrating knowledge management to culture and structure of the organization, knowledge investment, learning organization, visualization, and technological strategy. Apart from weaknesses, these strategies are effective in sustaining knowledge management in the organization.

The mentioned strategies have the linkages to the implications of knowledge management sustainability for leadership in the organization. As indicated in Section Four this study explored six implications of knowledge management sustainability for leadership in the organization. These implications are creating vision and mission in the organization, developing good governance, creating culture and structure of knowledge management in the organization, empowering employees, creating knowledge management system in the organization, and open to change. This era has changed. These changes are the shift from production/industry to knowledge economy (Cooke, 2002), from manual work to knowledge work (Drucker, 1999), and from managing physical assets to managing knowledge assets (Drucker, 1993).

Knowledge and knowledge management provide an axiology, the value added for the organization. At this point, the organization needs to create a systematic and holistic approach to sharing technical excellence and best practices to demonstrate added value and construct new knowledge in the organization (Venters *et al.*, 2002). Moreover, to

overcome the challenges of knowledge management sustainability, the organization should have broad leadership competences for knowledge acquisition and management in the future (Tenkasi & Boland, 1996).

5.5 Conclusions and Future Study Agenda

This study has endeavored to analyze and synthesize knowledge management conceptual framework and practices, strategies for sustaining knowledge management in the organization, the nature, styles and roles of leadership and the implications of knowledge management sustainability for leadership in the organization. This study concludes that knowledge management sustainability has the implications for leadership in the organization. These implications are that knowledge management acts as a driving force for leaders in designing vision and mission in the organization, improving good governance, creating a conducive environment for knowledge management initiatives, empowering, creating knowledge management system and open to change.

The findings of the study indicated that to explore the multidimensional aspects of leadership and knowledge management produces results that are complex and multifaceted. To minimize these complexities, leaders need the integrating and holistic approaches for managing knowledge in the organization in a sustainable way and to remain competitive in this knowledge era. Therefore, the organization needs to recruit leaders who have a wide range of skills and knowledge-based capabilities.

These multifaceted issues of knowledge management sustainability in the organization request additional studies to design the integrated and holistic analysis. As knowledge has the tacit dimensions that are embedded and embodied in every individual, knowledge has to be turned into organizational knowledge so that all employees and other stakeholders in the organization can access the available knowledge (Skyrme, 2003) and can be managed.

The knowledge management process model demonstrated in this study is incomplete and in progress. The integrated and holistic studies are needed and a new agenda for further research is required as a replication of this study. Therefore, this study is expected to become the foundation for future studies in relation to the implications of knowledge management sustainability for leadership in the organization.

In the final analysis, this study ends with a quotation in terms of the priorities of knowledge management in the organization:

Where strategic knowledge is strong, knowledge management can focus on enabling knowledge sharing and distribution, and ensuring that learning is focused on maintaining a strong competitive knowledge position. Where opportunities abound, knowledge management can focus on exploring the firm's "knowledge platform" by deriving new products or services from or by locating new markets for its knowledge. Where weaknesses exist, knowledge management must focus on acquiring knowledge, for example, through training, recruiting, or alliances. Where threats loom, knowledge management must focus on providing sufficient learning opportunities and capabilities to strengthen the firm's knowledge position. In all cases, a firm's

strategic agenda and competitive context should drive the priorities for knowledge management (Zack, 2002, p. 275).

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