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Indigenous Knowledge Systems (IKS): Application and their impact on industrial activities of companies in Africa

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To know where you are going, know where you are coming from. (Ziggy Marley-Reggae Star's Documentary "Africa Road Show")

Abstract:

Before post-modern industrial systems African states had different methods, ways, approaches and systems of doing things for survival and sustainability. Knowledge systems could be maintained, improved, implemented and passed on from generation to generation through oral tradition data banks, written records and archeological packages. Skills and expertise though they appeared individualistic they were used to benefit many people for example the "cow horn formation" was developed from the existing knowledge systems of that time. In pre-historic eras people could practice business principles like warehousing, marketing, accounting, human resources management, operations management, economics and purchasing and supply to mention just a few; that was through knowledge systems of the moment. In this paper forms of knowledge forms which contributed to the existence of the then people are going to be unraveled. In this rendition suggestions on how knowledge systems can be capitalized towards the development of sustainable future would be raised. There are a lot of developments which were generated from the indigenous knowledge systems for example the issue of education in Africa has a direct relationship to the folklores of the traditional societies. African societies are losing popularity because they lack contributions in terms of technological developments, product developments and innovations. So capitalizing on their (IKS) would come as a springboard towards development of Africa

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Introduction

Knowledge is a pivotal element in all facets of survival. In some sayings they asserted that “knowledge is power” This implies that without knowledge there is no production, no direction and no focus of life. Davenport and Prusak (1998:3) posit that

“Knowledge is a fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knower. In organizations, it often becomes embedded not only in documents and repositories but also in organizational routines, processes, practices and norms”

This definition sounds enough, however it takes issues of ontology for granted. Knowledge is generated everywhere, every time and from everyone, Butler in Schwartz(2006:1) proposes that there are relationships between the individual and his social world; that is between the knowing social actor and the social groupings and contexts in which he or she participates and exists, and in which knowledge is socially constructed. This on a larger scope portrays that knowledge differs from time to time, place to place and from organization to organization. Knowledge is the conversion of sight into perception and from perception to application. Knowledge management is then described as an integrated, systematic approach to identifying, managing and sharing all of an enterprise’s information assets like the databases, documents, policies, procedures and previously unarticulated expertise and experiences from individuals. When it comes to indigenous knowledge systems it would mean that the common phenomena from the people of certain citizenry must be shared and capitalized among the people for the generation of informed decisions to influence productivity.

Jordan the Minister of Arts and Culture of South Africa (2005) said;

IKS predates the imperial and colonial era. Despite the passage of time elements of it still are the lived experience of various communities. They have been preserved in the manner in which these communities deal with birth, the coming of age, maturity, marriage, old age and death. These ways of doing things have provided people with the survival strategies to deal with poverty and destitution, to create stability and how they co-exist with other communities. Much traditional knowledge could teach us how to interact with our natural environment and also to re-learn ways of healing that are efficacious and with few side effects. The performance of tales, song and dance so integral to traditional society still survives and has much to teach

And National Research Foundations (NRF) (2005) asserts that;

IKS refers to the complex set of knowledge and technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area...These populations...retain some of, or their entire own social, economic, cultural and political institutions. ...IK refers to the knowledge developed by these populations

in themselves, as well as knowledge developed through interaction with other populations in South Africa

From both definitions it is noted that knowledge can be preserved, modified, altered and destroyed through research, education, training, coaching, mentoring and oral story telling (folklore) as well as reading. It will be of use if the radio and television broadcasting would be used to help disseminate indigenous knowledge systems for wide coverage. The paper aims to expose the set indigenous knowledge systems which are of great help to business activities. Justifiably this would assist in the formulation of trade policies; the paper would promote the development of products which matches the indigenous people. Sustainable development can be promoted by the interaction of the people and their knowledge sources. Knowledge is the gate way to informed decisions.

Education in Africa Before Colonialism

History reflects that Africa had all forms of education during the pre-colonial era. The education system was mainly based in oratory approaches usually at early ages from (5-20 years); this age group was told folklore stories. The folktales were rich sources of the future indigenous knowledge systems depicting codes of moral conduct, policies of life, self-sustenance and ethical codes. If that were to be compared to present-day situation the folklore stage would be equivalent to primary education. From that stage they would graduate into adult world, where they would be exposed to village debates (politics of the day) that is especially for the boys. The boys would be instructed by the old men who would be associated with greater wisdom of life domains. The ladies would start learning issues of hospitality, housekeeping and household management, they will be doing this under the mentorship of old women who are experienced.

Senior boys would also get into practice doing things like iron and copper smelting producing malleable and ductile products (spears, axes, knives, hoes and arrows) though at a smaller scale it could suffice the needs of the population. This portrays that their knowledge sharing maintained them at a self-sustainable level. This knowledge was not tapped into modern day industrial activities.

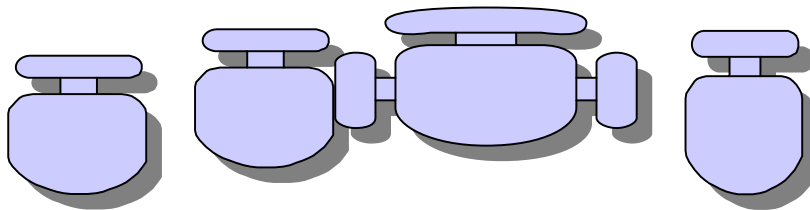
People were educated on how to produce medicines from herbs, produce heat for smelting iron from metal smelters (*mvuto*). In Zimbabwe the existing government(2008) led by Zimbabwe African National- Patriotic Front (ZANU-PF) tried to revive the indigenous knowledge systems in medicinal areas by establishing the Zimbabwe National Traditional Healers' Association (ZINATHA) assisting in providing health services to the people of Zimbabwe. By so doing people had a choice between modernized medicines and traditionally extracted concoctions. These processes involved almost everyone and talents were identified at every stage of an individual growth and development and later on shared among the African people.

Knowledge was managed in a specific routine way in African communities which made people grow well and well informed. Most of the learned issues were derived from the life experiences which are really a tool of positive reinforcement (motivation) towards learning (change of behaviour) and acquisition of new knowledge.

The education of the current times when compared to that of the pre-colonial period it is not at par. The pre-colonial education was far better because it had practical which were much relevant than those of the present. Presently Zimbabwe have so many people who had graduated with degrees and diplomas in engineering but Zimbabwe Iron and Steel Company(ZISCO) is at halt none can sought out the blast furnace's technical faults or develop something else to substitute it. This case is not common to Zimbabwe alone but Africa over. There are a lot of academic doctors and professors in Africa but most of the African countries are still trailing the poverty line.

Bahra (2001:176) supports the pre-colonial education in Africa by exposing how story telling can be used in business concepts. The author give the story of Eskom where most of the personnel was illiterate but educated when it comes to African knowledge systems, so the Training and Development Head had to use Africa's tradition of verbal communication to involve personnel at all levels. This is the past success which is used to avert the present failure.

The indigenous knowledge systems used to maintain the discussion set up in a circular form, influenced most of the present lecture theatres to adopt a circular form as shown below



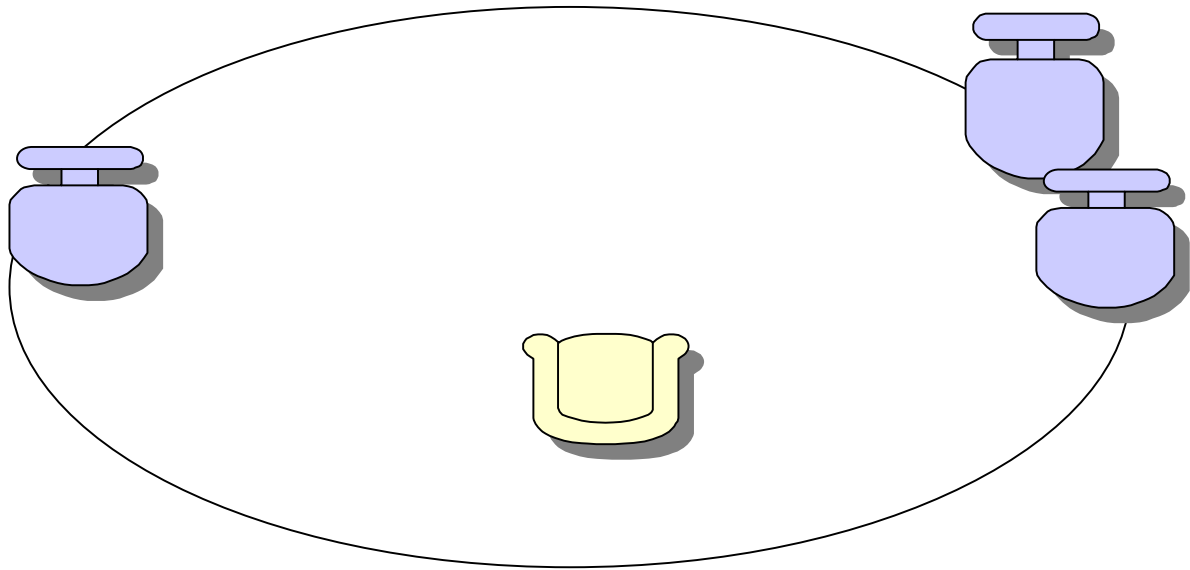


Figure 1: The round-table set up derived from traditional folklore sitting format (From the research)

This set up allows every member involved in the meeting, seminar or training to see face to face with the source of knowledge and get involved in the issue under discussion with total commitment.

The pre-colonial education equipped people with a number of skills which included the following;

Oral education Folklore Stage(Primary)	Courtyard education (Secondary/tertiary)
Listening	Carpentry, Hunting
Singing	Black smithing and Iron or Copper smelting
Dancing	Curving, Weaving
Counting	Knitting, Cooking
Running	Budgeting
Socializing, Bargaining	Leading, Fighting(for protection soldiering)
Story telling	Entrepreneurial, Planning
Advertising and Public Relations	Architectural

Table 1: The Composition of indigenous knowledge systems skills sharing during the pre-colonial era (From the research)

These skills forms part of the indigenous knowledge systems, without it was very difficult to meet the categories of being a person by standards (*ubuntu*). These skills were imparted by experts who had the dexterities of doing that specific task.

During the pre-colonial era the indigenous knowledge was compulsory. Every child was supposed to go to the story teller's place to receive some education whilst the senior boys would go to the family court (dare) and ladies to the aunties. This was done to ensure that everyone is given a chance to discover what was expected at each stage of life. These usually took heuristic approach to life problems. Heuristics is a common present-day business approach which is generally cheap to spread valuable knowledge and information quickly.

People usually could learn by doing the thing thereby building experience for practical acquaintance with facts or events; knowledge resulting from the process (Swoden 2000). This process promotes collective experience which in turn brings diversity of technical expertise and consequently specialized work groups could be created for example those with hunting skills could collectively come together and form a team the same with those for curving and metal smelting.

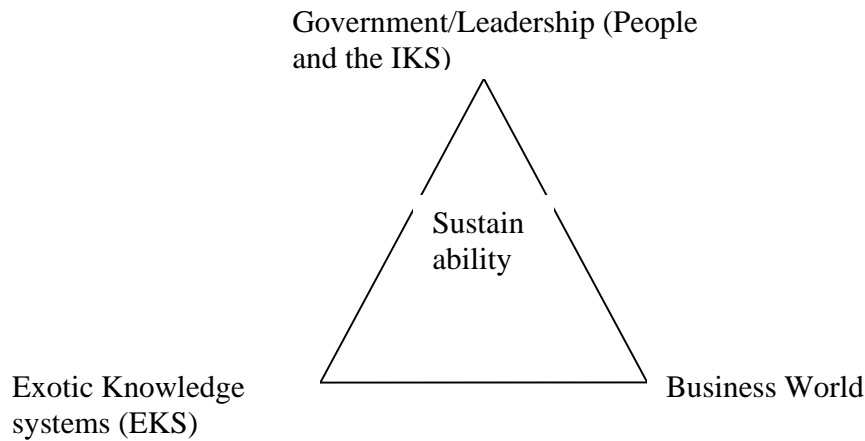
Indigenous Knowledge Systems and the Future Business Processes

Nel (2005) says;

“Indigenous knowledge systems (IKS) are about the knowledge, practices, values and ways of knowing and sharing in terms of which communities have survived for centuries. IKS is not only knowledge and practices of culture, custom, agriculture, medicine, biodiversity, ethnonumeracy, customary law... but also the rationality of these cultural practices and rites that effected social cohesion, creativity and artistry of dance and music, technology of fashioning, clothing and beadwork”

This definition seems to limit IKS to traditional systems of business which are archaic as if IKS are fixed and cannot change. However the thesis in the definition allows people to think in a positive way towards supplying people clients/customers or consumers with the right products, at the right time, with the right quality and for the right purpose. People had a substantial amount of information on IKS but they are not worried about applying it instead they keep it for history under the guise of heritage, sovereignty and nationalism. Mosimege(2005) postulates that, the recognition of the value of indigenous knowledge is clearly gaining ground world-wide, in South Africa it is ensconced in governmental policies relating to IKS in general, living heritage, trade and industry, biodiversity, science and technology, traditional health practitioners and traditional leadership, governance and sustainable development. Mosimege's expurgations reflect that in order

for indigenous knowledge systems to survive there is need for the government to support, formulate and implement them in live activities. This can be modeled by a model below;



Model 1: Forces surrounding sustainability (Derived from the research)

The government has a role to play on regulating what the people (indigenous) would call knowledge. There is some type of thinking among the indigenous people which can destroy business which in turn would paralyze the sustainability of the economy. For example in Zimbabwe there is Chiadzwa Marange diamond deposit, the people in that place had their own knowledge, practices, values and ways on how to the products of the deposit could be benefited. Their perceptions and beliefs led to struggles of control between the Zimbabwean ministry of mines, the government leaders, the citizens in Chiadzwa area and other external interests to the extent that the diamonds from that area were condemned and labeled blood diamonds. Under such circumstances the state, people and corporate world must discuss then the generally acceptable agreement. Exotic knowledge systems must be mixed with indigenous knowledge systems within the rightful proportions to produce a good recipe for positive development.

The indigenous knowledge systems in Africa lost to exotic systems and they lost pride and popularity because they lacked contributions in terms of technological developments, product development and innovations. However despite the loss, by capitalizing on indigenous knowledge systems of Africa a new Africa can be generated. People must understand that most of the wars in the world, ethnic, civil or world wars are a result of undermining one's knowledge and understanding of life concepts. When other nations from the west, east and the north colonized Africa, they missed one thing—the IKS. They brought new life concepts familiar to themselves. That slowed the business processes and led to imbalances in the distribution of wealth, resources and knowledge.

For future developments and sustainable programmes in Africa the indigenous knowledge systems must be integrated into business. In order for both indigenous and foreign investors to serve Africa in the best way, they must understand the past, present and future methods, ways and approaches known by Africans. People must be ready to mix, socially, economically and politically. The interaction would allow people from Africa to heal from the legacy of colonialism and western knowledge imperialism. Due to colonialism and imperialism the African people had no opportunity to develop their countries in the way they felt plausible except to follow the protocols of the colonial masters. The idea of indigenous knowledge systems must not be centralized to African languages alone but must also be distributed to all faculties of learning in schools, colleges and universities. In fact people should learn IKS philosophies in all disciplines.

IKS and the planning function in African Companies

To cut expenses from imports, African companies must plan for the Africans based on the values, knowledge, practices and ways of knowing and sharing. Brokensha, Warren and Werner (1980:1) emphasizes that development planners should consider accumulated knowledge and traditional skills and technology of the people among whom they work. The contributors in this issue are mostly social or cultural anthropologists but as of late other disciplines are also represented—geography, agricultural economics, political science, education and agronomy.

Before any business plan is approved it is better for the management to seek some knowledge from the indigenous people they are serving. In most cases people whom the business is serving have detailed knowledge of what they need not otherwise available to the management team. In most instances due to lack of IKS most football stadiums were built on very arable land suitable for farming and that one which was supposed for stadiums was left for farming. This affects industrial activities in Africa. In South Africa, there is Moloto road; rumor has it that, it was constructed without the consultation of the local people. That makes it a death trap; it has so many accidents each year. Planners have to do a lot of consultation before they get into decision-making. Company planners must work hand in glove with the education providers, the community and the state in order to avoid clash of interests and unnecessary criticisms from the indigenous knowledge managers.

Urban centres in Africa have a reflection of poor siting due to the fact that the town planners lacked foresight and insights of indigenous knowledge systems of the weather patterns and soil types. For example Gauteng in South Africa often receives a substantial amount of rains than Limpopo, yet very little farming activities are taking place in Gauteng but in Limpopo. This forces farmers in Limpopo to sacrifice effort and money through irrigation and intensive processes to meet the demand of food across the country. Under such circumstances planners have to consider soil type and rainfall patterns, given the case that Africa's economy is hinged on agriculture there is no reason to build town structures for residential on arable land when there are partially arid areas. James (1996:129) posits that, some believe that for economies to become sustainable and

productive, the issues they confront can be understood, in part, through a historical approach to understanding how relationships with western economies affect and influence them. In this argument James portrays that the positive past should be ingrained and understood for improving the sustainability of African economies through agriculture and natural resources maintenance.

Effects of Exotic Knowledge Systems on Planning of African Businesses

Exotic knowledge systems do not mix their values with the indigenous knowledge systems because of the capitalist mentality which concentrates on benefiting with out considering the processes of benefiting. In most cases African indigenous knowledge systems are demonized and taken as backwards and dysfunctional. Semali and Kincheloe (1999:21) assert that western scientists maintain that much can be learned from a number of ethnosciences which includes ethnobotany, ethnoastronomy, ethnopharmacology, ethnomedicine and ethnocosmology. Despite these benefits western science relegates indigenous knowledge systems to a lower order of knowledge production.

African businesses planning processes were based on the size of the moon and levels of growth of people. Western businesses planning were based on calendars. However all of them had an intention of taking action for the future, today. In African business context there was strategic planning, that is why the chiefs used to promote what is called *zunde* (a collective food warehouse for the whole kingdom). This was a strategic warehousing decision meant for the whole chiefdom to cater for shortages in times of poor harvest and drought. Similar to that are the Grain Marketing Boards (GMB) set by the colonial business and the silos. The differences between the GMB or silos and the *zunde* lies in fact for the *zunde* food was distributed free of charge to those in need but that from the GMB or silos is sold. Without money one can not access it. The shocking thing with grain from GMB is when one is selling they are bought with the price for a lower grade when it comes to buying all will be in the same grade.

Exotic knowledge systems make the indigenous knowledge systems to be side lined. Semali and Kincheloe (ibid) expose that indigenous knowledge is tacitly decontextualised severed of the cultural connections that grant it meaning to its indigenous producers, archived and classified in western databases and eventually used in scientific projects that may operate against the interests of the indigenous people. The major problem is the indigenous people themselves are not able to identify knowledge and keep that knowledge for competitive purposes, most of the products' raw materials are from Africa and by virtue, and the products are manufactured in the western countries and named after the producers in their language. When it comes to construction, the western architect only put the plan on paper and the African people do the donkey work. Whilst the African works through their knowledge, the western knowledge producer insists on testing the validity and reliability of the job via western scientific tests.

The planning of the African indigenes was not for mass production, but was for sustenance, the westerners' planning is for mass production and competition making business processes complicated. Those complexities in turn have large impact and pressure on the existing resources, contrary to that Jansky, Haigh and Prasad (2005:62) Acquisition and evolution of IK is considered critical mechanism in achieving the environmental and social sustainability of resource use. Fielding and Kirsopp in Jansky, Haigh and Prasad (2005) suggest that IK has sustained local communities for generations, particularly those who have yet to meet any extension agents.

Despite the negative effects the exotic and the indigenous knowledge systems have to mix and produce a plausible and feasible business recipe to take African business activities on track. This would reduce the donor syndrome on African economies. The development of African business would mean a change at the world market business levels. If Africa also participates at the world market in the way Japan, Korea and other eastern and western countries participate the world would never experience serious business recessions and depressions. Above all democratic societies would be established, poverty disturbs social systems.

Traditional Indigenous Knowledge Systems: Contributions to Present Business Situations

It is a common phenomenon that almost all societies through their developmental stages and business cycles, from developed to developing started as agrarian societies then get into green revolution and proceeded to industrial revolution up to information societies (where information and communication technologies are taking the toll) The existence of any society is anchored in food procurement as the first priority followed by other forms of leisure. The following table, Table 2 demonstrates, indigenous knowledge systems that are applicable to present-day business

Business	IKS applied
Agriculture	Cultural information on type of crops and the staple food, adaptive systems, soil fertility, society and environment, rainfall patterns, conservative nature, knowledge and technology, work patterns
Mining	Rock type, taboos and voodooos, previous processing methods, community requirements, mineral values, mining methods, reservation methods
Information	Word of mouth, blowing trumpets, appropriate register, cultural requirements

	beliefs, values and communication
	protocols
Tourism	Life histories, customs, traditional arts and structures, environmental resources, buildings, ruins, rivers, weather patterns sacred places
Health	Birth, growing, old age and death, diseases ethnomedicine, ethnopharmacology, food
Trade	Monetary values, other forms of exchange generally acceptable, product quality, product development stages, perception attached value
Education	Existing knowledge, language, literature, teaching methodology, curriculum, content, nature of students, learning history
Defense	Nature of battle formation, history of wars

Table 2: Indigenous Knowledge Systems Applicable to present-day Business Processes (Adapted from the research)

In Africa tourism industry is one of the most lucrative businesses due to the fact that generally people are friendly and hospitable. Complementary to that people in Africa have kept their heritage for example Zimbabwe have maintained the ruins at Great Zimbabwe, Gokomere, Zihwa and Chibvumani; these have great reflection on the maintenance and reservations of indigenous knowledge systems. They are a source of knowledge to Zimbabweans and other people across the world. Zimbabwe is named after those stone structures the name reserves the knowledge behind Zimbabwean history, people of Zimbabwe have pride in these stones and the beauty associated with the natural resources of the country.

Indigenous knowledge affects the consumer behaviour of the people within a given society. Strydom (2004:53) identifies that cultural values, norms and symbols are created by people and are transmitted from one generation to another to ensure survival and also to facilitate adaptation to the circumstances of life. A consumer's culture further determines overall priorities in different activities and products. Thus, a product that provides benefits consistent with those of indigenous knowledge systems is much more desired by members of a certain culture and has better chances of being accepted in the market. Van der Walt (1998:85) asserts that South African society is fragmented into many cultural groups and subgroups. Marketing management must therefore be careful

not to use symbols in advertisements that can be interpreted incorrectly or differently, and not portray unacceptable behaviour patterns. Effective communication can take place only if the theme of the advertisement reflects the cultural norms, values and symbols of the cultural group at which it is directed. This clearly spells out that indigenous knowledge is of significance towards the direction of business in any given community.

Brink (2000:35) alludes to indigenous knowledge systems in the following quotation;

“Some black and white culture groups, for example, interpret advertisements differently. For example flowers have special significance in the white culture, but in many black cultures, gifts in the form of flowers are frowned upon. The well-known *Five Roses* advertisement which said, “And the fifth rose is for you” was therefore not successful when used in media aimed at black consumers. Cross-cultural mistakes are also made in other countries. For example, in Germany, Pepsi’s advertisement “Come alive with Pepsi” was presented as “Come alive out of grave with Pepsi”.

Such presentations have adverse effects on business and product perceptions. These have to be rectified in a way which matches the indigenous knowledge systems in a continuous way. Knowledge is ever-changing so business should change on a regular basis.

When applying indigenous knowledge systems, companies must be careful of falling into the dungeons of patriotism, indigenization and nationalism. Knowledge systems are different from the mentioned principles.

Benefits of Indigenous Knowledge Systems to African Business Thought

IKS closely links *ubuntu* to business world. *Ubuntu* is a profound African philosophy based on the recognition of people’s humanity through their participation as members of a community. A very simple translation of the idea is “people are people through other people” (Dugmore, Horner, Mooney, Nieftagodien and Lekgoathi 2007:245). Tutu stated in 1996:

“God has given us a great gift, *ubuntu* *Ubuntu* says I am human only because you are human.... You must do what you can to maintain this great harmony, which is [constantly damaged] by resentment, anger, desire for vengeance [punishment for wrong doing]. That’s why African (thinking) is restorative rather than retributive. (Wilson, Nesiah and van Zyl 2002).

In turn this would bring sovereignty to African business because they will be self-ruled and business people would be respected for their good, ethical and moral governance of their investments. They would be contributing greatly to the sustainability of their communities.

IKS promotes democratic business principles, such as the right to vote for a government, shareholders and business partners, equality, freedom of speech, movement, religion and

thought. This allows the business world to take another turn. From indigenous knowledge, business can start expanding across African borders. Trade have been there in African continent since time immemorial, internationalization of any business need a clear description of the IK of that country in which the company need to start operations. Shepherd and Katz (2005:9) propose that internationalizing new firms face dual challenge of over-coming the liabilities of newness and liabilities of foreignness. On this instance they will be new and foreign in terms of indigenous knowledge systems. Hence, due to their newness, new firms are constrained in their ability to access external resources required for survival and growth. The foreignness relative to the foreign target market, internationalizing firms are disadvantaged relative to domestic firms in the issues of establishing business relationships. This act as some kind of protectionism to the indigenes but, however, the importance can be realized if the knowledge systems are opened to the world exposure. Knowledge systems act as a control measure, had it not been that effect Africa would have been robbed of all the resources by the western colonizing countries.

Indigenous knowledge systems control the insatiable desires of the two forces: socialism and capitalism. These are economic thoughts which can be destructive if they are not controlled. Socialists' theories argue that an economic system must be based on the ideal that those who produce the wealth must be owners. The capitalists' theories argue that an economic investment must be under the control of individuals who own the enterprises which produce wealth such as factories, farms and mines. This means that business ideology is to be under the control of certain categories of people but at this age of the knowledge societies wealth of any given society belongs to the people who have a common knowledge of the whole community. Capitalist mentality has high chance of creating a closed system. Socialist mentality can lead to the creation of an open system but the problem would lie in the question of who would take control of that system. Dugmore, Horner, Mooney, Nieftagodien and Lekgoathi (2007:81) purport that Mwalimu Julius Nyerere, former President of Tanzania, 1964-85 refined and implemented the policy called "African socialism". On this kind of knowledge he had a vision of a future Tanzania which is prosperous, self-reliant and classless society. Encompassed in his philosophy was Tanzanian socialism based on local resources rather than imported high-technology industrialization. Indigenous knowledge systems were highly promoted in Nyerere's policy; the emphasis of government and business was to be upon rural development and allowing rural areas to be self-reliant and self-sustained. This is a good approach to urban growth. Rural areas are reserves for the town activities. In Africa if there are no rural areas; heritage would have been no-more. In rural areas trees, wild life and cultural deposits are maintained better than they are maintained in urban technical archives, zoos and botanical gardens.

This case of Nyerere's Tanzanian socialism is one of the knowledge systems which can be adapted to overhaul industrial activities of companies and governments in Africa. He suggested that Tanzania's mass of small remote rural areas must be gathered into larger, more effective villages, for government to provide better roads and rural markets combined with agricultural advice and improved technology. Better water, health and

education facilities to be provided efficiently to larger centralized villages. The policy was known as *ujamaa* (Swahili word for extended family). A vital aspect of *ujamaa* was the promotion of the “African socialist” principles of communal labour for the benefit of the community towards improved and increased agricultural productivity, enabling communally cultivated fields to produce a surplus for sale to the towns or for export (Shillington 1995:417-419). This case is applicable to all African independent countries like South Africa, Zambia, Lesotho, Swaziland, Namibia, Botswana, Mozambique, Zimbabwe and Kenya to mention just a few. Zimbabwe attained land but they messed it up, because of inefficiency and poor service delivery. Nyerere behind this idea he was influenced by the way people used to live in historical times given the situation that some of the processes of evolution had started in Tanzania at Olduvai Gorge implying that all developmental processes also started there with the advent of tools. Above all the idea of collective settlements was well known in African Kingdoms, for there were the likes of Mwenemutapa, Luba-lunda and the Zulu state, people in these states stayed in clusters sharing common knowledge and resources like salt, gold, copper and iron. Many skills developed from these clusters in the Zulu state the developed “cow horn” formation type of formation on attacking the enemy in modern day war strategies they call it “surprise attack”

Egypt had a lot of indigenous knowledge; some of it is still applicable across the world in business sectors today for example, the calendar, paper, pen and irrigation (*shaduff*). One can be justified to say indigenous knowledge systems are highly applicable to business processes towards sustainable development in Africa and the eradication or the alleviation of poverty in African states. (Ki-zerbo 2003:129-130) affirms that the gold of the Sudanic region and Zimbabwe became a source of prosperity for the Maghrib and the near east, while still strengthening the great empires of the western Sudan and Mwenemutapa. Iron was traded in ancient times between North and South, while copper was the basis for transcontinental traffic towards the Indian Ocean. The salt mines on the edge of Sahara played an important role between the kingdoms south of the Sahara and the Arab-Berber people. During these periods people were using their indigenous knowledge systems and were benefiting but later on they were dominated and exotic knowledge systems took over benefiting the colonialist- capitalist, who substituted the indigenes and overpowered the business processes to date.

Freire and Faundez (1989) find indigenous knowledge as a rich social source for any justice-related attempt to bring about social change. Indigenous knowledge systems are raised from the nature of our existence, our consciousness, our knowledge production and the “globalised” future. Furthermore indigenous knowledge counters western science’s destruction of the earth. IKS has a tendency of focusing on relationships of human beings to one another and to the ecosystem. This finding concurs with that finding by Tutu of *ubuntu* observed by (Wilson, Nesiah and van Zyl 2002). Western sciences have been reckless to both African people and their ecosystems. If one looks at apartheid in South Africa and colonialism in Zimbabwe one would see that the colonial masters were not

bothered about issues of health and welfare of people in terms of human rights and the environmental pollution.

An appreciation of the IKS from business today comes from the activities like corporate social responsibility. This shows that companies are accountable and responsible to the probable damages that impacted on the people and the environment due to business processes. Some big companies are ploughing back the profits to the communities who were supporting them in business. They are giving donations and sponsorships sponsoring the HIV/AIDS victims and orphans, soccer, education and support programmes for the poor.

IKS gives the indigenous people an opportunity to give decisions on those aspects of business that affect their lives. It also promotes team work. In African economies people used to work in teams for example in *nhimbe* (beer parties) work was done collectively by a group of people sharing ideas and pooling their effort and resources together to promote productivity, efficiency and effectiveness. It was not easy for one person to build a house alone so had to call others for help the food and beer that were to be provided after the group task was not a payment but was just a token of appreciation. It is highly motivating, if African labourers are allowed to form work teams basing on their values and interests. In their groups at *nhimbe* African people used to sing at work to boost morale and spreading knowledge through songs. In like manner in modern industries there must be improvements in workplace morale by adjusting ecology and ergonomics to make work much more interesting, pleasurable and motivating by boosting the morale of employees.

Indigenous knowledge systems are beneficial to business applications and company activities in Africa. This paper is encouraging business practitioners in Africa to take cognisance of Africans and their values to meet the needs of Africa and its environment towards user-friendly production, ethical labour practices and user-friendly consumption.

Factors Affecting the Applications of IKS in Industrial Activities in African Companies

There are a number of factors hindering the applicability of IKS in industrial activities in African companies. They range from;

- Nature of education imparted to the people of Africa by the western scientists and philosophers.
- Lack of terminology for technological developments, product developments and innovations
- Cultural disorientation and language displacement
- Divide and rule imposed by certain leaders
- Neo-colonialism and cultural imperialism
- Globalisation

- Romanticisation
- Demonisation of other business practices
- Epistemological hegemony
- Power and scientific colonialism
- Lack of money and degradation in terms of economic levels and status
- Fear of change – fear of the unknown
- Subjugation- who is allowed to proclaim the truth.

Conclusion

Applying indigenous knowledge systems in business scenario is a daunting process. However if it can be applied it can bring much success than failure; in fact it would bring harmonized business systems which would allow the people and ecosystem to interact in a friendly way. Every society has its indigenous knowledge systems, to avoid unnecessary business challenges those indigenous systems must be valued and given priority in business decisions-making processes. It is found that knowledge systems can be mixed to produce a hybrid of knowledge systems. For example the western (exotic) knowledge systems can be mixed with African indigenous knowledge systems. They should be mixed in equal proportions to avoid domination, oppression, inferiority, over-dilution and colonization of the other. IKS can be used in management functions and that knowledge can be derived from proverbs, stories, riddles, songs, food storage structures, buildings and nature reserves to mention a few.

IKS can change for the positive or negative from the old IKS to the new IKS. Presently given the fact that the African IKS have a strong bias towards the western knowledge systems, African business activities must manipulate and capitalize on the hybridism and reinforce their business systems which would be highly competitive on the world market. The major point is knowledge systems must be kept open otherwise they would become archaic and rendered obsolete and useless. On final note it should be however, noted that every person is an indigenous somewhere so people should not take pride in being indigenes of certain community and relax. It's encouraged that one should participate towards the sustainability of that indigene, complacency have destroyed many economies which were once first class countries for example Zimbabwe.

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