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The Role of African Proverbs in Advancing Information Systems Research

Research Paper

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ABSTRACT

Despite the richness of African proverbs, they have been muted in information systems (IS) research. This explicitly contributes to the lag in developing information systems and technology solutions for African people by African researchers in African terms. It is on this basis that two related objectives were formulated: (1) to examine the role which African proverbs can play in further advancing IS research, and (2) to understand how the concept can be employed to indigenize IS research. Qualitative data were collected from different sources, and the dimension of social change from structuration theory was employed to examine the role African proverbs can significantly play in advancing IS research. The analysis reveals that African proverbs can be employed in all stages of IS research, from problematizing the phenomenon, data collection to data analysis and interpretation of findings.

Keywords

African proverbs, structuration theory, indigenous knowledge, information systems research.

INTRODUCTION

In the last two decades we have seen and experienced an evolution in information systems (IS) research, which extends to the application of lenses such as structuration theory (Giddens, 1984) and actor-network theory (Callon, 1986; Walsham, 1997) from the sociology field, to underpin IS studies. Also, there have been increases in IS collaborative works across disciplines, geographical locations, language dialectics, and cultural affiliations, which draws on many realities from ontological viewpoints (Morrison et al., 2003). Simplistically, collaboration is the act of co-operation and interaction among a team of people towards a common goal (Ciftcioglu et al., 2017). The evolution includes increasing use of a storytelling approach for collecting data in the field. In the midst of all these, originality is often not purely original in many IS studies. This is due to the fact that meanings are sometimes manipulated or distorted because certain incidents or objects are difficult to explain or inexplicable when giving literal meanings in spoken languages but can be better expressed through proverb. A proverb is considered to be the horse that can carry one swiftly to the discovery of ideas (Yoruba tribe, Nigeria).

In IS research, African proverbs and etymological experiences have so far been completely ignored, despite their richness and transdisciplinary presence. This affects understanding, induces the silence of original meanings, and increases misrepresentations of terminologies that are associated with locale episodes and native spheres in IS research that involve indigenous people in villages and other rural areas on the African continent. The challenge can be addressed through the richness of African proverb, which is currently in a mute mode in IS research. Proverbs are widespread across the African continent, to ease understandings and clarifications, making it essential in IS research which is digging deeper into indigenization of social systems.

Although Majchrzak et al. (2000) explain the criticality of language in knowledge sharing and reuse for collaborative purposes, this is not enough. The use of language is deeply rooted in its semiotics, which is enacted by proverbs as in the case of Africans. Proverb refers to messages that are coded in a dialect communication, subsequently understood and influencing an indigenes actions or response. Proverb plays an integral part in expressing oneself, asserting the African unique tradition and cultural values. Hence, it is logical to imbibe proverb into all areas of life, including IS research, which has in recent years increased its presence in African traditional and social systems. The study of proverbs has long been a subject of research by academics such as philologists, psychologists, and anthropologists (Zhitomirsky-Geffet et al., 2017), but not in IS, and not in Africanizing IS research. In some quarters, proverb represents embodiment of wisdom and philosophy about episodes in a natural setting (Asika, 2016). The philosophies applied in IS research are of western origin.

In the face of extending inclusivity of indigenous people and growing collaboration with native locale, IS research has been used to explore, zoom in-and-out of all walks of life, from engineering to medicine including economics and politics, from African perspectives. These emeritus works of IS research are founded on linguistic de facto evidence that has no bearing on the African root and are used as a judgmental factor for communicative competence. The main challenges in collecting data from indigenous people are that understandings differ, various meanings are associated with the same episode, and terminology solutions or artefacts are difficult or impossible to translate. These challenges create gaps, which are often manipulated for ease of passage. Such manoeuvres are detrimental to the development of IS phenomena on the continent.

African cultural beliefs influence conduct and responses during research pursuits. This draws on the Yoruba tribe in Nigeria that says, a proverb is the horse that can carry one swiftly to the discovery of ideas, which IS research is all about. An aspiring researcher can benefit from the Ashanti of Ghana proverb which says the end troubles not those that understand the beginning, as: A well-articulated problem and clearly formulated objective, help define the direction, and successful completion of a research. African proverbs can make research more understandable for indigenous candidates than any other explanation whether in classrooms or laboratories, and specifically in fieldwork. This is fundamental in that if IS research across the African continent must lie in the hands and wisdom of its people, their proverbs must be imbibed and put to practice. Based on the gaps identified above, the objective of the study is to explore the role of African proverbs in advancing IS research in the African context. The research question is: How can African proverbs be infused to advance IS research?

Sequentially, and for comprehension purposes, this paper is structured into eight main sections, starting with an introduction, followed by a review of literature. The theoretical framework is covered in the section that follows. Thereafter, the methodology is discussed. The findings and data analysis are presented and discussed, respectively. The validity of the study is covered and lastly, a conclusion is drawn.

LITERATURE REVIEW

The discourse on the concept of African proverbs is not new; it has emerged at different times and in different contexts (Sehoole & De Wit, 2014; Bosman, 2002). However, IS scholars have completely shied away from it. Proverbs are for specific purposes, are not spontaneous, and are evoked by events that require wisdom to appease the circumstances and provide native figurative expression. Gibbs and Beitel (1995) argue that proverbs' interpretation can be used to normalize misunderstanding and dysfunctional thinking. The Yoruba of Nigeria says that the man who knows proverbs reconciles with difficulties. According to Eastman (1984), "situations evoke proverbs, and anyone who knows how society should be is expected to use proverbs to help realize that ideal" (p. 330). Some proverbs are routine in societies, particularly in Africa. From structuration perspective, Giddens (1984) explains that routine interactions become norm and institutionalized in a social system and to cultural affiliates in a society.

It is well documented that proverbial genres are not exclusive to Africans. In some other nations, proverbs are used for learning in science. A Chinese proverb describes an underlying philosophy of experiential and active learning: Tell me and I will forget. Show me, and I will remember. Involve me and I will understand. Step back and I will act. This can be applied not only in art or language, but in many disciplines including IS to facilitate the full understanding of indigenes and their participation in the development of systems. Such proverbs are suitable for cognitive apprenticeship (Krusche et al., 2017), which is required in IS research particularly for postgraduate students. According to Zhitomirsky-Geffet et al. (2017) proverb forms an essential aspect of a nation's cultural heritage and does reflect collective wisdom in challenging circumstances. For example, Makovhololo and Iyamu (2020) explain the explicit challenge that could have been avoided through a proverb in the absence of literal meaning: In Soshanguve (of South Africa), although the word *isibabo* is commonly used for itching, the actual meaning is to discharge. This challenge misled IS specialists in the course of developing medical systems.

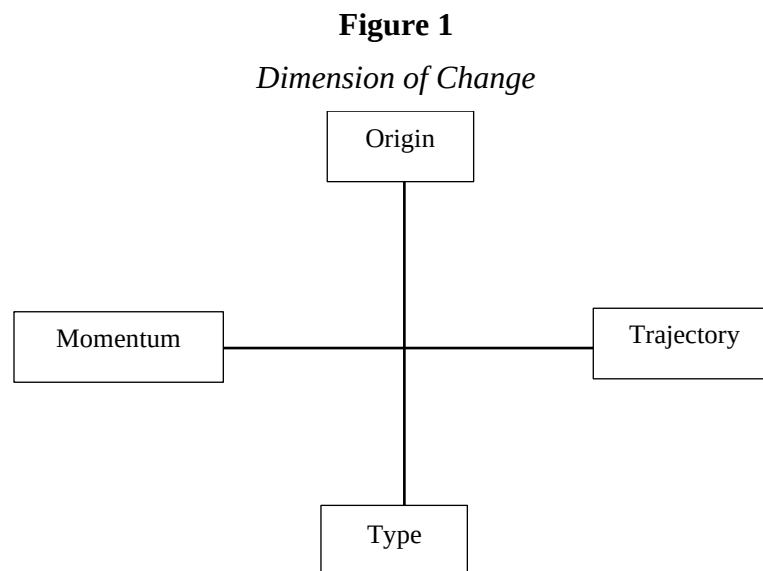
The increasing interest in indigenous knowledge and its originality prompted Makamani (2012) to conduct analysis using Shona (Zimbabwe), Oshiwambo (Namibia), Yoruba (Nigeria), and Swahili (Tanzania/Kenyan/Congo) proverbs, to show the rich potentiality in African proverbs. Dei (2016) focuses on Ghanaian and Kenyan proverbs to reaffirm cultural knowledge as part of indigenous African philosophy. Etta and Mogu (2012) demonstrate proverbs' indispensability of knowledge, and how it forms the core of African epistemology. Long before the exploits by these scholars, Grant and Asimeng-Boahene (2006) propose the use of African proverbs as a frame for teaching and learning. These represent recognition of proverb's contribution to heritage, cultural values, and conservative philosophy that must be extended to developing IS solutions. On the teaching front, the use of African proverbs seems to be an on-going discourse, which is completely different in the aspect of research, particularly in IS. The use of African proverb in research methodology can characterize indigenous knowledge of ontological and epistemological stances in phenomena being studied, which currently remains a gap. Chilisa (2017) rationalizes such epitome of indigenous and local knowledge as a body of thought that can help scholars or researchers to comprehend what they know, how it is known, and how it can be known. This epitomic aspect of IS research is missing.

African proverbs are helpful in making "sense of the community" and a sense of respect for authority and elders who are in possession of wisdom by virtue of their experiences (Adamo, 2015). Also, it is a part of indigenous knowledge systems that is entrenched in the practices of communal wisdom and intellectualism (Chilisa, 2017; Dei, 2016), which is often used in the management of activities in locale. The usefulness and effectiveness of proverbs to enhance teaching and learning have been argued and

proposed in many academic disciplines (Gebregeorgis, 2015; Tedam, 2013). A similar approach is being proposed in this paper for IS research. The universality of African proverbs makes them applicable to IS research (Machado, 2002). Thus, IS researchers can employ African proverbs innovatively and creatively to facilitate data collection including analysis and interpretation of data and findings. This makes proverb an additional lens of value and rigour to IS studies. Through African proverbs fresh air can be “breathed” into what can be known about an object or subject, rather than assumptions that the community cannot relate to, or the researcher cannot translate. These notions exist because some responses from certain locale are complex and are easily and substantially distorted, creating the belief it is the reality for many scholars in IS research.

THERORETICAL FRAMEWORK

The dimension of change from structuration theory is employed as a lens to underpin the study. The main tenets of the theory are structure and agent (agency), and it focuses on both technical and nontechnical factors (Iyamu, 2019). There are three primary rationales for selecting the theory: (a) it is a constructivist theory that focuses on humans as social constructs (Puron-Cid, 2013), in the process of exploring reality and actionable words, (b) it allows dialectic expression of human actions as they undergo translation, and (c) it enables tracing of communication and interpretation of words, from their originality into future action, from the dimension of change perspective. The dimension of change as shown in Figure 1 consists of four components: momentum, origin, trajectory, and type (Giddens, 1984). It is used as a way of thinking and to guide analysis of data in the phenomenon being studied (Iyamu, 2021). These four dimensions endorse a narrative situation from different perspectives, from data collection to discussion of the findings and interpretation.



Note. Adapted from Giddens, 1984.

African proverbs emphasize the importance of understanding the origin and trajectory of behavior toward momentum of the social reality, which can be seen from varying type and perspectives. In Mayer’s (1994) comprehension, a proverb is a short sentence which contains wisdom, truth, morals, and traditional views in a metaphorical, fixed, and memorable form that have been in existence from one generation to another. It evokes linguistic density and subtlety, which provides richness that would have

been ordinarily missed in varying circumstances. Thus, the dimension of change is used to gain an understanding of the explicit message and latent meanings that can be encoded in proverbs. This is to further advance IS research in the areas of data collection, analysis, and interpretation.

The dimension of change was used to guide the analysis, which employs the hermeneutic approach, in the following purposes and ways:

- a) **origin:** In dimension of change, origin is a component that is concerned with investigating and evaluating the source of an episode, including the historical components (Tungela et al., 2018). Such change adopts African proverbs to dimensionally disrupt and/or reshape the current status de facto in data collection and interpretation of findings, particularly in IS qualitative research. It is a transitional notion that requires researchers to learn and understand the dialectic aspects of African proverbs in collecting data from indigenous people.
- b) **type:** In social settings such as indigenous systems, type highlights the impact which change has on an establishment, from both negative and positive viewpoints (Giddens, 1984). From the dimension of change perspective, type involves an episode, such as the augmentation of African proverbs in IS research. This includes an understanding of the distinctive and sensitive types of information about an episode (Tungela et al., 2018).
- c) **momentum:** This is the rapidity at which change occurs (Çam & Kayaoğlu, 2014). Giddens (1984) associates momentum to specific forms of episodic characterization. This can be associated with the change with which African proverb can be used to transform and advance IS research. This can include response time and the rate at which postgraduates and researchers can embrace the concept in conducting research among indigenous people.
- d) **trajectory:** Trajectory refers to social change that points in a specific direction (Boje et al., 2017), enabling a focus. *Kugara hunzwana* - living together calls for a peaceful co-existence, in Shona, Zimbabwe. This is inevitable in a collaborative effort. In a community engagement project, members feel at home because they can dialectically express themselves, which sometimes spawns enthusiasm. Trajectory enables the use of African proverb towards specific directions in the collection of data, analysis, or interpretation in IS research

Conceptually, the dimension of change is employed as a framework to theorize and explain the possible role of African proverb in IS research. Philosophically, the theory extends knowledge (CohenMiller & Pate, 2019) about the applicability of African proverbs in IS research, as disconnectedness of indigenous people is unbounded. Also, the conceptual framework helps to put the phenomenon into applicative nature and gives exploratory and explanatory power within the context of the objective and purpose (Köffer et al., 2014; Thong & Yap, 2000).

RESEARCH METHODOLOGY

The qualitative research methods were selected in this study because of its focus on social and cultural perspectives (Taylor et al., 2015). The techniques and approaches of qualitative methods focus and assist in understanding people, social systems, and cultural contexts (Myers & Avison, 2007). Based on these factors, the interpretivist approach was preferred, and subjectivism was allowed. The methodology entails data collection and data analysis. These aspects are split into subsections to provide distinctive clarity.

Data Collection

The data were collected from different sources; interviews, and existing materials. The latter were documentation from a total of four current and completed projects: (a) DePaul University collaborative project - completed; (b) collaboration between Cape Peninsula University of Technology (CPUT), South Africa and American University (AU), Nigeria - current; (c) a doctoral research project - completed; and (d) a master's research project - completed. The projects were explored at different levels of fieldwork. More details about these sources are provided below. Documents related to this study were gathered. This included outputs from the collaborative projects and data from the postgraduate studies. A total of six interviews were conducted; two postgraduate students and four members of the collaborative projects, using the semi-structured technique. The participants were selected because their projects were conducted on rural communities in different parts of the continent, which include Angola, South Africa, and Namibia. In addition, the participants were interested in partaking in this study.

Long before I could, Guest, Bunce & Johnson (2006) had already asked the fundamental question: How many interviews are enough? Without substantive justification to the answer, Creswell (2007) recommends between 5 and 25 interviews for a phenomenological study, a category which this study falls within. Marshall et al. (2013) suggest that a small sample size of interviewees is insignificant. The authors also did not provide evidence for the recommendation. This same point has previously been argued by other researchers, such as Patton (2002), that there are no rules or guidelines for interview size in qualitative research. It depends on the objective, inquiry, usefulness, and most importantly, the relevance of the data.

A large data set does not guarantee purposefulness or usefulness in qualitative studies. Thus, I draw on Ryan and Bernard (2004) who argue that it is neither about the quantity nor many sources of data in qualitative studies. Also, it is important to understand that saturation is crucial and must be reached at some point (Fusch & Ness, 2015). Morse (2015) argues that saturation is key to excellence and that it is "the most frequently touted guarantee of qualitative rigour offered" (p. 587).

The interviews were in two phases. The first phase was a face-to-face interview with each of the participants. The second part of the interview process was carried out via telephone, which helped to build on the initial interviews and enabled clarifications to be sought about some responses. The first phase took place between January and March and the second was in April 2020.

From the interview perspective, the storytelling approach was employed in collecting data from the participants. It allows the participants to narrate their experiences during data collection as well as in data analysis and interpretation of findings. This was to explicitly understand how the African proverbs could have been used in their studies, thereby helping to achieve the objective of this study. The approach is well suited to exploratory and descriptive studies in IS research, such as this. Chilisa (2017) argues that methodologies rooted in African philosophies and history, bring alternative ways of conducting research to the academic discourse. The interview questions were: (1) How can African proverbs be used in advancing IS research? and (2) Why do you think African proverbs can be used to enhance data collecting from indigenous people? Information about the projects follows.

The DePaul University collaborative project involves seven universities from four continents: North America, Latin America, Europe, and Africa. A South African university and a Ghanaian university participated in the project, which aimed to develop virtual software for resource coordination and recruitments. The project started in 2011 and was completed 2018. Both the agile and waterfall approaches were used, which created difficult interaction and challenging negotiations between participants from different countries. This was because certain terminologies, circumstances and events were difficult to express or

translate to its intended meaning. Some of the participants echoed proverb as a useful tool for eliciting information from the natives and uneducated persons.

An on-going collaboration between CPUT, South Africa and AU, Nigeria started in 2020 between the two African universities. Postgraduate students are involved in the collaborative project. The collaboration focuses on developing indigenous healthcare system, specifically for nomadic and rural people. Consequently, both old and young, literate, and illiterate indigenous people are involved in the requirements (data) gathering and systems' user testing. In the process, it is sometimes cumbersome in extracting information from some of the participants in the rural areas, because some natives had no figurative expression in offering certain useful information. As a result, some of the people employed proverbs to express themselves, and when they did, it was sometimes misconstrued. For example, a participant in South Africa said in isiXhosa "*Umuntu ngumuntu ngabantu*". This was interpreted by one of the project fellows as a person is born out of a person, which was not what the participant meant. Unfortunately, the collaboration will not succeed without the involvement of the indigenous people.

A doctoral research study to develop a mobile systems framework for the translation of languages in South Africa was completed. The data were collected from the indigenes of Soshanguve township, Pretoria. Soshanguve was selected for the study because of its uniqueness: Uncommonly, it have many different spoken languages within its locality. Four languages, isiZulu, Sepedi, Tshivenda, and Xitsonga-speaking people were the main habitants of the township. Consequently, these four languages were used to elicit information about language semantics from the community members. The recipients were not fluent in speaking the English language, while some were unable to read or write, which made articulation, construction of tenses, and figurative expression a challenge. As a result, many of the community members, especially the older generations, found it difficult to share their opinions and experiences without the use of idiomatic (proverb) expression, for fear of losing meanings and intentions.

A master's research project to develop an information system framework, which can be used to address the challenges that the duplication and inaccuracy of data pose to the identity document system in the Republic of Angola was completed. The participants lived in the different regions of the country. There were challenges and conflicts in expressing experiences by the participants. This affected the quality of the qualitative data that was collected. Like the experience of the doctoral candidate, the language was not the primary problem. Some of the interviewees wanted to express themselves and share their experiences and views in an idiomatic way, to capture their intended meaning appropriately and accurately. For example, when the student probed conflict between two government departments about the control of a system, one of the participants who spoke in Kinbundu language responded in a proverb by saying "*Ungudi uvananga yengue*". This means that both departments have no understanding of the national interest and goal, and that understanding is the agent of peace. The participant finds it difficult to articulate in his spoken language. Another interviewee says in Kikongo of Angola, "*Uludi nzo ka utunganga muntu mosi ko*", which means a person cannot put on the roof of a house alone. She meant to say collectiveness supersedes in building and accessing a database for a common goal.

Data Analysis

The study was underpinned by the dimension of change, which means that the theory was used as a lens to guide the analysis of the data. The process focused on gaining an understanding of how African proverbs can be used to further the advancement IS research. Within the frame of the dimension of change, the hermeneutics approach was employed from the interpretivist perspective (Bleicher, 2017).

The hermeneutics approach focuses on reality within human natural settings, which can only be well understood through interpretivist, subjective reasoning as required in this study (Silverman, 2018; Galehbakhtiari, 2015).

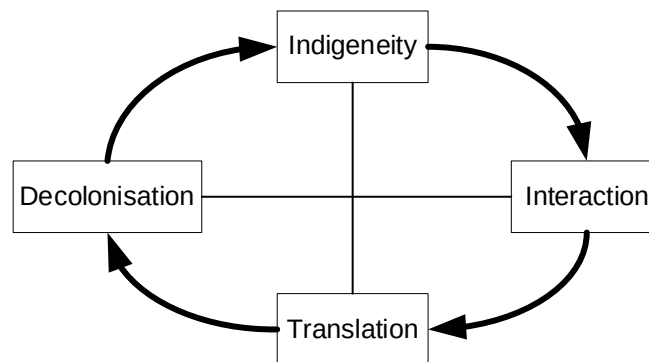
In using the approach, the data from both interviews and documentation were read several times and viewed from the angles of momentum, origin, trajectory, and type, to put things into context and relevant perspectives between African proverbs and IS research. The process was repeated until a satisfactory conclusion was reached, based on which the following factors are found useful in IS research: indigenization, expansion of coverage, ordinating collaborative efforts, collection of data from native minds, and translation of dialectic expressions in locale.

ANALYSIS AND FINDINGS

The analysis was conducted using the hermeneutics approach and guided by the four dimensions of social change: origin, trajectory, type, and momentum. The analysis focuses on the role which African proverbs can play in advancing IS research. The dimension of change offers a lens to examine the origin and trajectory of different incidents and interactions that change circumstances; the type of incidents and interactions that exist, and the momentum or speed at which the incidents and interaction can change situations. Figure 2 results from the analysis. It consists of four factors which are considered most critical in employing African proverbs in IS research: (a) indigenous, (2) translation, (3) interaction, and (4) decolonization. The factors help to gain better understanding of figurative expressions of culture, syntaxes, and various genres such as narratives of events, through African proverbs.

Figure 2

The Role of African Proverb in Information Systems Research



The four factors indicate that African proverbs can be employed at different stages of IS research. This includes problematization of the research, storytelling, and interaction with indigenous people during data collection, and the use of native embroidery for creative analysis of data and interpretation of results. The use of proverbs at these stages of IS research promote inclusiveness of the African people including those that are not literate in western schooling, in finding solutions in their unique contexts. Discussion of the four factors follows.

Indigenous

A people have their own special repertoire of proverbs, which characterizes their being, therefore, it dwells in them through regionalization. The Masai of both Kenya and Tanzania say the bark of one tree does not adhere to another tree. This means that a nation cannot assimilate the proverbs of another. It has its version in English, which says the proverbs of a nation are the great books out of which it is easy to read its character. In an IS study by Makovhololo and Iyamu (2020), it was found that there are major

challenges in translating African languages. Therefore, they advocate for direct automatic translation for more appropriate correctness, completeness, and accuracy. This type of challenge can potentially spawn a change in momentum, in the transformation and development of the use of African proverbs in IS research. Also, indigenization can help to shape problematization of research in areas of systems and technologies.

African culture and linguistic experiences have so far been completely ignored, despite its transdisciplinary approach that can be of value in IS research. A Kinyarwanda (of Rwanda) proverb can serve as a source of strength and encouragement to take further steps, through a fundamental question: “*Ese urubura ruguye urikwubaka inzu, urabihagarika? Cyangwa uhindura imisumari?*”. It means, if a nail breaks while building a house, do you stop building, or change the nail? The concept of African proverbs enables researchers to continuously search for alternatives in their exploratory, explanatory, and descriptive IS studies. Creatively, this can lead to possibly employing proverbs in different ways that fits methodological approaches, and techniques and generates originality. Also, it helps both researchers and learners to understand their African concept in the application of research outcomes.

Decolonization

Like many others I recognize the struggle for indigenous philosophies to advance IS research in the African context. Decolonization and indigenization should not remain at the level of theoretical exercises, but art that must be learned and practiced. An Ethiopian proverb says it better as he who learns, teaches. We teach what we research and research what we teach, which should relate to our source of origin and indigenization. In mostly villages and rural areas, African proverbs are used as the foundation of teaching, interaction, and learning. It is a chesterfield conventional wisdom that is in a capsule manner, which makes it aesthetically pleasing and memorable to those who benefit from the dialectic. Over time, individuals invent such nuggets of wisdom, using traditionally sanctioned ideas and ways of speaking, making it a norm.

In many African societies, proverbs are deeply rooted in the extent to which they are used as communicative acts in daily activities (Bosman, 2002). Proverb is used to define relationships, describe experiences, convey ethical messages, and expressive events. This can be valuable in the collection of data (particularly in qualitative research) and interpretation of findings in IS research. The Ashanti of Ghana say when the occasion comes, the proverb comes, complementary with that of Edo speaking people of Nigeria that says, proverbs are used to resonate experiences. This means that the events of life evoke the creation of proverbs. In the process of collecting data, many researchers struggle to translate or express some aspects of conversation in transcribing the data in empirical studies, which increases the chance of manipulations or incompleteness. The transcribed data is theoretical, remains raw and therefore limits the researchers’ ability to learn more, and dig deeper into events of native nature. To gain more knowledge about the African heritage and culture through IS research, a change is needed. Such circumstance is not always easy to explain without distortion, but proverb helps to improve explanation and understanding. For example, it is easier for indigenous people of Ghana to understand and explain complex circumstances in their own words, through proverbs such as, it is the calm and silent water that drowns a man.

Translation

In the dimension of change, routine interactions become institutionalized in a social system, and, as a result, this becomes the norm as well as the culture in the environment (Giddens, 1984). Interaction is a modality through which information flows between agencies, people, and society (Mutudi & Iyamu, 2020). The interaction can be made easier or more difficult, and meaning or intentions lost depending on

the communication medium or tool. In Amharic (of Ethiopia) language, it says “*mammaaksi dubbii gabaabsa*”, meaning proverbs shorten matters. African people have endured change to the colonial approach and mentality for far too long and IS research has contributed little or nothing to the upliftment. One of the outcomes from an IS research by Mutudi and Iyamu (2020) expresses that the reproductive nature of challenges manifest and often have negative effect on people that live it.

Currently, there seem to be no existing ontologies for proverbs. In IS research, African culture and linguistic experiences have so far being completely ignored, despite its transdisciplinary approach. This takes away the concept of regionalization, in one more area, putting the African people at a disadvantage. This makes it difficult to establish and shape Africa’s direction and role in IS research. This despite African philosophers moving beyond the age of the debate as to whether African philosophy exists or not (Etta & Mogu, 2012). No doubt, a proverb is a terse and humorous philosophical way of conveying lessons and events. Regionalization is locale, and locale is not about a place. It encompasses a setting in which specific and unique interaction ensues. In an explicable expression by Giddens (1984), regionalization is a setting that allows persuasion largely in a tacit way, which focal actors employ to sustain meaning within context. According to the Kikuyu people of Kenya, we speak by proverbs; he who is intelligent will understand them, which ironically means only the wise can understand proverb.

Interaction

Humans interaction is influenced by time and place in each episode (Giddens, 1984). Proverbs play an integral part in African languages and can be used to embed ideas toward logical conclusions (Asika, 2016). However, most IS researchers employ non-pejoratively approach in describing nomological events that adheres to a natural science model (Jones & Karsten, 2009), which has completely ignored Africanism and its proverbs, despite its ingenious and strength in figurative expression. The doctrine of colonization has guided many quarters in the Africa continent from the determinism to explore and remain faithful to origin and indigenization. African proverbs instigate historical memory and reflection, which invite deeper thinking and alternative measures and consideration of events.

Although different cultures have distinct sets of rules, similar rules of speaking cut across the African continent. This can solidify collaboration of IS research within the Africa locale. Consequently, various research motivations and methods have produced diverse approaches toward organization and classification of proverbs into convenient indices for further search and retrieval (Zhitomirsky-Geffet et al., 2017). Regionalization also has strong psychological and social resonance (Giddens, 1984). In an emphasis on regionalization, the people of Congo say that proverbs are the affairs of the nation. Regionalization is the level of presence-availability associated with specific forms of locale. The use of proverbs is essential in conversation between researchers and indigenes of a specific region. The approach can be used for development purposes (Schoole & De Wit, 2014). Giddens (1984) affirms that the nature of social interaction can be purposefully examined within context, and in relation to regionalization.

DISCUSSION OF THE FINDINGS

The dimension of change was employed in this paper as a way of thinking in the analysis. I employ the origin of the IS research episode through characterization to understand the necessity and essentiality of African proverbs (Tungela et al., 2018). In the process of investigating the types of change in an episode, transformational speed is established to determine the trajectory of advancement (Giddens, 1984). From the analysis, I conclude that African proverbs can be used to (a) indigenize IS research, (b) expand coverage of IS research exploration, (c) further advance research platforms, (d) further enhance

data collection from natives and indigenes, and (e) translate syntax. This is intended to make proverbs an integral part of the stages of research in IS, from data collection to data analysis including interpretation and evaluation of findings.

Indigenize IS Research Through Inclusiveness

Significantly, the use of African proverbs contributes to research in addressing challenges of decolonization and indigenization and helps to promote sustainability of African science. This makes the concept highly necessary in IS research where corroboration is essential, particularly in areas of data collection and analysis. The aspect of African cultures that highlight communalism and collectivism is an asset to collaborative and corroboration in research (Dei, 2016). It has long been debated whether proverbs should inform African education systems, but its incorporation in many spheres has remained a challenge (Makamani, 2012). Inclusiveness can help to resolve this challenge through translation indorsed by the concept of African proverbs in IS research. It is therefore vital to employ African proverbs to exemplify mindsets and actions to reach unprecedented levels of interviewees' views and experiences in collecting data.

In the dynamism of inclusiveness, many people experience challenges. For example, in the Tshivenda language of South Africa, there is no correct semantics or a word for disease such as cancer, which makes it difficult for direct translation to English or any other language. In the native language, cancer is generally referred to as *tshilonda* which means wound when translated literally into English. Another example, as expressed by one of the nurses, in Tshivenda, “*Ndi tshitamba tshifhinga tshothe nowa yanga iya luma*”, which means I suffer pain every time I am menstruating. But when translated into English, it means every time I take a bath my snake bites. Deep words that have difficult figurative expressions can easily be understood through proverbs, in the collection of data and interpretations of findings. Bosman (2002) argues that African proverbs can be utilized for hermeneutical purposes of decalogue in an African context. This helps to promote inclusiveness of African people in IS research.

Expands Coverage of IS Research Exploration

Many areas of African inimitability and inventiveness have been missed or avoided in IS research over the years, primarily because of the struggle to find meanings to some artefacts including their transformative evolvments. African proverbs can also play significant role from this aspect in that it is used to figuratively represent strong intertextual and intercultural threads of the roles, statuses, and identity of its people (Hussein, 2009). Etta and Mogu (2012) emphatically argue that African proverbs are concerned about creating knowledge for the betterment of human existence and advancement. This stimulates indigenous knowledge in IS research. Within the African tradition, proverbs can be used as a way of gaining knowledge, and is deeply embedded in community's cultures, historical beings, indigenous cosmologies, and worldviews (Dei, 2014). Thus, the concept can be used in all spheres of life to add value to the education system (Makamani, 2012) through IS research.

Advances Collaborative Platform

Collaboration between African IS scholars has remained at a peripheral level, not deep-rooted enough to invigorate African heritage and indigenous knowledge in IS. The argument here is that African intellectuals, particularly IS scholars need to grow beyond philosophical assumptions of the western pyramid and start imbibing the home-grown philosophy through African proverbs. This is to succour and cultivate originalism into the design and development of IS solutions that are of African epistemology, for the people of Africa and by the people of Africa. As shown in Figure 2, only the owners can interpret it, and find a solution for it. Many Africans associate more with proverbs especially

at times of clarifications, conflicts, and misunderstandings as experienced in collaborative works among intellects. In enhancing collaborative work through a united front, an Amharic (of Ethiopia) proverb draws “*dir biyabir anbesa Yasir*” meaning that when spider webs unite, they can tie up a lion. In the context of this study, the lion here is the African proverb, which require a collaborative effort in advancing exploratory and explanatory IS research within the African context and relevance.

The concept of African proverbs entrusts forms of epistemology, to explore and examine indigenous knowledge derived from experiential learning and the inter-relationships of communities (Dei, 2016). This can be considered magnificent in that it advances IS research. In Chilisa’s (2017) view, the concept can be used as a, or part of methodology, in addressing African challenges and solution-driven research agendas. This view has long been pondered, perhaps, leading Dei (2014) to employ African proverbs focusing on communities to examine convergence from cultural knowledge systems viewpoint. This type of effort requires energizing, proverbially put by South Africa as a tree does not make a forest, which endorses collaboration and corroboration, to an understanding of most Africans. However, despite agreed upon memorandum of understanding and memorandum of agreement, many collaborations for research purposes are challenged, and some are terminated. In such instance, African proverb can be used as conflict resolution mechanisms (Gebregeorgis, 2015). For example, an Amharic (of Ethiopia) proverb says “*Gira ena qegn egirm ygachalu*”, which means even the legs of one person get the friction of a quarrel.

Enhance Data Collection from Indigene

The use of proverbs enhances communicative competence in the collection of data from indigenous people or natives of homelands. The concept can give the natives the free will to share information (or data) in the utmost detail and richness. According to the Oshiwambo people of Namibia, learning expands great souls. African proverb eases an understanding and ascribes meaning to deep and complex circumstances. During data collection particularly in the use of semi-structured interview technique, some aspiring researchers and postgraduate students do not necessarily exhaust probing of the interviewees’ responses. This can be attributed to various reasons, such as fear of confrontation or cultural “line-crossing” that are offensive to elderly participants. Although the Cameroonian proverb says, he who asks questions, cannot avoid the answers, the interviewers are often not appeased in such circumstances. This is the type of situation that must resonate with native minds by applying proverbs to ease any confrontation or tension.

It is important to note that many Africans particularly those in native lands, make use of proverbs in various ways to convey messages of strong or deep substances or circumstances. The Yoruba of Nigeria says the man who knows proverbs reconciles difficulties. An understanding of proverbial figurative meaning requires higher order cognitive abilities (Gibbs & Beitel, 1995). This type of knowledge can be gained during data collection. Eastman (1984) argues that the ethnography of speaking based on proverb can be used in analysis of empirical data necessary to test any ultimate theory of the action. During data collection, proverb can therefore be used by both interviewer and interviewees to seek, alter, or reinforce understanding by referring to characteristics, landmarks, space, and time. Asika (2016) explains how proverbs were used as tools to justify actions of characters, and advocate virtues.

Translation of Syntax

The widely held idea that failure to provide a figurative interpretation of a proverb necessarily reflects a deficit in specialized abstract thinking, which is considered rejected (Gibbs & Beitel, 1995) also applies to IS research. Grounded upon years of experience and close observation of life, from one generation to another, and natural phenomena, the proverb, through metaphorical language, may warn, advise, or

reprimand by drawing attention to consequences of human behavior. The IS research is certain to benefit from such metaphorical and figurative expression of events and activities within indigenous environments. Origin is fundamental to human existence, which is significant in the use of IS research-based solutions for track and trace of clans and behaviors. Thus, the Xhosa of South Africa proverbially believe “*Umuntu ngumuntu ngabantu*”, a person is a person through persons. In the context of technology transfer, it had been articulated as a person’s use of technology to empower others will in turn empower oneself. This makes more sense to both researchers and the participants, rather than English expressions that are confusing synonyms or difficult to translate into their actual meaning.

Some words or phrases in many African languages are naturally difficult to translate using a borrowed language, such as English. The mangrove tree dwells in the river, but it does not make it a crocodile say the Edo people of Nigeria. Many IS researchers including postgraduate students are having their fair share of this challenge indorsed from the use of borrowed languages. An example is from a study by doctoral IS candidate: If a Xitonga-speaking patient says to the health practitioner “*ndzi twa ndzi hlamba timbilu*”, the English translation means I feel like my hearts are washing. However, what the patient was trying to say is I feel nauseous. Proverb can be used to subsume the difficulty in the direct translation of such words and phrases. This is primarily because proverb use can be incorporated under linguistic function, as a tool for persuasion or understanding in a dialectic interaction or conversation.

VALIDITY OF THE STUDY

I employed nomological validity, an increasingly popular approach for assessing construct, as proposed by Boudreau, Gefen and Straub (2001). The nomological validity of this paper lies in the fact that many researchers including aspiring researchers and postgraduates agreed that the discourse invoked by this study can contribute meaningfully to IS research from Africa proverbs’ viewpoint. The nomological validity is a construct that focuses on theoretical research rather the measures (Straub, Boudreau & Gefen, 2004). I therefore began by asking and answering fundamental questions regarding the need for this study: (1) What are the elements of reliability? (2) What are the correlating factors? These questions contributed to the validity of the study, as follows:

Correlation - Data were collected from multiple sources, consisting of existing materials and interviews. The participants comprise both established researchers and aspiring (as at the time of this study) researchers. The participants are Africans who reside in three different continents, Africa, Europe, and North America. The experience of the researchers and postgraduates who participated in this study correlate with the construct, therefore enacting the validity of this study as it aimed to imbibe African proverbs into IS research. Straub et al. (2004) argue that content validity is a desirable practice, especially in the absence of strong theory and prior empirical practice.

Reliability - Measures were taken to systematize the materials that were gathered to ensure the reliability of the qualitative data. This was done from two angles:

- 1) The guidelines suggested by Silverman (2020) were followed, based on which I interacted with both established and aspiring researchers of Africa origin, and some community members (focused on illiterate) of the continent. I compared experiential views of the researchers with the expectations of the community members
- 2) Based on the objective of this study, triangular analysis and interpretation were conducted. This is a type of validity that demonstrates that research results are applicable in natural settings (King & He, 2005).

CONCLUSION

The study seeks to understand the role African proverbs can play in IS research, which was examined through the lens of the dimension of change. The study provides an answer to the question: How can African proverb be infused, to advance IS research? From the study, it is clear that the concept can play a role in IS research by promoting inclusiveness of the African people and eliminating the use of an interpreter in data collection as some researchers do. This allows indigenes that are mostly illiterate to express themselves freely and comfortably, without distortion of meanings, thereby increasing the pool of participants. Most importantly, this will broaden the leverage with participants rather than quickly reaching point of saturation in collecting qualitative data. In IS research, African proverbs can therefore be accumulated and used as synonyms of wisdom, a repository of traditional African knowledge, philosophy, and conversation of customs and standards. Thus, the proverbs can be a vital educational artefact in the context of IS research.

Through inclusiveness and collaboration, this paper reveals that the use of African proverbs can play a significant role in IS research that uniquely focuses on African people and their environment. As exploratory research, it forms a foundation for further work. The paper promotes and justifies the application of African philosophy through proverbs, in IS research. As African experiences need to be reflected in indigenous ways, thereby contributing to knowledge and development, it is of significance to begin to employ proverbs in IS research. This will contribute to the originality of IS research, including IS collaborative efforts within the continent of Africa. In addition, the effort will interpose to connect Africa with itself first and foremost, before externalization with the international world. Thereafter, from an IS research perspective, Africa can connect its viewpoints with the global context. On this basis, a conclusion is drawn from a Nigerian proverb: Wealth diminishes with usage; learning increases with use. This requires the contribution and commitment of more researchers, as the Shona of Zimbabwe assert “*chara chimwe hachiswanyi inda*”, a single finger cannot kill a tick.

This is another opportunity to demonstrate dialectic inclusiveness and African experiences and narratives from their respective origins into modern society, from the angle of IS research. The discourse provoked by this study intricately promotes the emancipation of locales in the advancement and sustainability of African people that claim to have their own African ethics and communal experience in advancing IS research in the continent. This paper is limited from two main viewpoints; (a) it is theoretical. It would be interesting to see and experience it being put to practice; (b) the paper did not define how exactly African proverbs can be used in IS research. This paper lays the foundation for further research discourse on the use and impact of African proverb in IS research.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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