# Analysis of the alliance of archives, libraries, and museums of South Africa National Parks: Kruger National Park

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## Abstract
The research aims to analyse the alliance of archive, library and museum (ALM) at the Kruger National Park with regards to compliance with legislations, ALM's role in education and the adoption of information and communication technology. A qualitative method was used to collect data. The research found that most of the participants were not aware of the legislations governing ALM in South Africa. ALM was not fully utilised for educational activities to enhance knowledge management; there is a low rate of adoption of information and communication technology as an enabler to provide education. Hopefully, this study will help to formulate research agendas to address societal challenges, such as adopting the policies which will have a positive impact on the implementation of ALM policies.

## Keywords
Alliance, archive, library and museum, education, technology

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## Introduction

The article aims to analyse the alliance of an archive, library and museum (ALM) at the Kruger National Park (KNP) by assessing compliance with legislations, role in education and adoption of information and communication technology (ICT). ALMs have more in common than they are different; they serve various communities. ALMs are natural partners. Although ALMs are located in different organisational structures in the KNP, they have similar goals of providing education. The ALM alliances enable KNP to merge different skills and knowledge to achieve an organisational mission of connecting to society. The role of the ALM is to identify, collect, preserve and describe records or artefacts materials and make available artistic products of the past and present to the future generation.

## Problem statement

There is little recognition of the alliance of ALMs in South Africa's role to provide education and access to information to enhance knowledge management. Only a few alliances of ALMs in South Africa were conducted such as the Kimberley Africana Library at the Sol Plaaatjie Municipality in the Northern Cape and the De Beers Archives, in which all three institutions share knowledge and customer service (Yarrow et al., 2008). The above-mentioned alliance involves different organisations. Hence, this particular study alliance involves KNP with different departments such as archive, library and museum under the umbrella of heritage management. According to Mabunda (2003) and Netshakhuma (2019g) the overwhelming majority of research studies conducted in KNP are on biological diversity. None of the research conducted at KNP covers aspects of the ALM alliance.

## Purpose

The purpose of this article was to analyse the alliance of ALM at KNP by assessing their compliance with

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**Table 1.** Interview participants

| Number of Participants | Positions | Duties and responsibilities |
|---|---|---|
| 3 | Record officers | Filing, allocation of reference number |
| 3 | Assistant Librarians | Cataloguing books, issuing of books and cataloguing of archival materials |
| 1 | Archives assistant | Appraisal of records and description of records |
| 1 | Records Manager | Management of both archives, library and museums of national parks in South Africa |
| 1 | Heritage Manager | Responsible for the cultural and heritage management throughout the national parks |
| 1 | People and Conservation Officer | Interpretation and analysis of artefacts. |

legislations governing ALM in South Africa, their role in education and the adoption of ICT to enhance education and to make recommendations based on the findings.

## Theoretical framework

This research adopted the International Committee for Documentation of the International Council of Museums (CIDOC) Conceptual Reference Model (CRM). The CIDOC CRM was developed in 1996 (Doerr et al., 2008). This theory is an object-orientated domain ontology for the interchange of rich and heterogeneous cultural heritage from ALM. The CIDOC CRM is an international organisation for standardisation (ISO) (Doerr, 2003). The CIDOC CRM theory acts as a conceptual guideline to aid in developing integrated information systems with a higher level of semantic interoperability. ALM organisations are coming closer together in a variety of ways and under a variety of models (Gwinn, 2009). ALM institutions are similar in terms of collection type, curatorial approach, subject discipline, granularity of description, level of detail of description, descriptive data structure and descriptive data content values (Gill, 2004). There is no single descriptive schema which meets the needs of all ALM functions. According to Novia (2012), ALMs have different standards and practices that need to be reconciled into one collaborative project. Libraries use the MARC standard to capture bibliographic information, an archive uses the encoded archival description (EAD) and museums use the collection management systems to search automated collection management information. The role of CIDOC CRM theory is to promote a shared understanding of the concept used in a cultural heritage documentation by acting as a conceptual reference model. According to Gergatsouls et al. (2010) managing heterogeneous data is a challenge for ALM institutions because of different types of collections preserved by these institutions. The model is designed to promote the meaningful exchange of heterogeneous digital cultural content from the ALM institutions.

According to Goerz et al. (2008) CIDOC CRM theory serves as follows:

- as a generic background ontology for application modelling;
- as a tool for interoperability and data integration either by pre-processing databases (data transformation) or at access (time by inference);
- for processing complex queries which require inference;
- to check consistency and coherence of extension of the theory.

The use of CIDOC CRM is applicable to this article as the researcher aims to assess the level of compliance with legislations and the role of ALM in education.

## Research methodology

The research design of this study is a case study. The reasons for the researcher to select KNP as a case study is because its resource centre, namely the Stevenson-Hamilton Information Resource Centre (SHRC) ALM, is based in one institution. The study was limited to the SHRC. A purposive sampling of 10 practitioners was adopted. The sample size of the interviewees therefore stood at 10. The profiles of the participants are shown in Table 1.

The targeted departments such as archives, library and museums have a direct obligation to oversee the welfare of ALM functions in terms of preservation, providing access, education, management and compliance with ALM functions-related legislations. The data was collected through interviews with key staff members based on an interview schedule that was

designed along the research topic which was complemented by document analysis in the form of archives materials, oral history files and annual reports.

## History of South African National Parks

The South African National Parks (SANParks) include the following parks: Addo Elephant, Agulhas, Augrabies, Bontebok, Camdeboo, Garden Route, Golden Gate Highlands, Kalahari Gemsbok, Karoo, Mapungubwe, Marakele, Mokala, Mountain Zebra, Namaqua, Richtersveld, Table Mountain, Tankwa, West Coast and KNP (SANParks, 2019: 16). The researcher selected KNP to conduct the research because of its rich history of cultural history management. For the purpose of this research, SANParks will be used interchangeably with KNP. KNP is one of the biggest parks in Africa.

The KNP has its origins in the 1898 proclamation of the Sabie Game Reserve. The KNP is renowned for its unparalleled wildlife management in the African continent (Mabunda, 2003). KNP preserves the South African heritage in the most pristine condition for future generations (Ubisi, 2014: 22). The KNP is part of the Great Limpopo Transfrontier Park (GLTP), which includes the established Limpopo National Park in Mozambique and Zimbabwe (Sandwith and Pfotenhauer, 2002).

SANParks was established in the terms of the repealed National Parks Act, 57 of 1976 and continues to exist in terms of the National Environmental Management: Protected Areas (Act, 57 of 2003) with the mandate to conserve, protect, control and manage national parks and other defined protected areas and their biological diversity. Furthermore, SANParks is managed by the Public Finance Management Act (No. 1 of 1999).

Section 55 (1) of the National Environmental Management: Protected Areas Act (No. 57 of 2003) includes participation in international, regional and national initiatives relevant to its mandate identified by the Minister of Environmental Affairs as part of SANParks' responsibilities. The international convention of which SANParks is part includes the World Heritage Convention (WHC) which aims to promote cooperation among nations to protect all forms of natural and cultural heritage of outstanding universal value. The principles and guidelines of this convention are used by SANParks to guide its policies and plans for the management of ALM assets associated with the national parks.

The idea of merging ALM resources at KNP was first articulated in 1969. At that time, the ALM services co-existed under a common administrative structure known as the SHRC. Even though there is no single professional title that encompasses everyone who works in the information resource centre. The SANParks 2008/2009 strategic plan presented the idea of a resource centre that would include resources of the ALM functions within a single entity. The archivist, librarian and museum curators report to the head of corporate services. At the time of the interviews, the ALM functions resided in the same building. Hence, there are no artificial boundaries of ALM departments. The SHRC was established to support the memory of James Stevenson-Hamilton who served from 1902 to 1946 as the first warden of South Africa's Sabi Nature Reserve which was incorporated in KNP in 1926. SHRC was established to advance the interests and goals of KNP and provide physical or virtual access to specialised information resources. One of its great attractions at Skukuza is the Stevenson-Hamilton Memorial Information Resource Centre housing a collection of ecologically orientated books, paintings and memorabilia. Knowledge can be gained in the SHRC, while visitors can attend to life-long learning opportunities. The SHRC has cultural, social and historical significance as the first park resource centre. The collections preserved in the parks include the African collection which consists of information about the history of KNP. Archives and libraries functions were established to support the museum function to contribute to their parent organisation by helping them to develop their own approach to information and knowledge management. This statement is alluded to by Jones (2016) who said that museum activities tend to have a different relationship to interpretation and dissemination when compared to archives and libraries functions.

The concept of information resource centre was developed in the KNP and has extended to other parks. These centres are being developed through the alliance of ALM departments of each national park. Even though their manifestation is not the same as the national park system, the premise of establishing a building that functions as a focus point like an ALM is a key agenda. The establishment of the information resources centres is ongoing and there are increasing projects dedicated to making them a successful project.

KNP engages with the national Department of Arts and Culture, Basic Educational Department of Higher Education and Training which have oversight of heritage resources in South Africa. The ALM function provides a pivotal space for negotiating meaning about past histories, reconstructions of cultural memory and reinterpretation of culture (Anderson, 2005: 15). The KNP ALM are the product of historical

struggle as they are sources of the history of the development of the park (Netshakhuma 2019h). SHRC provided a wealth of information about the development of the park. Through the collection preserved in the information resource centre it is possible to locate the moment when KNP started.

## Literature review

The article was reviewed based on the legislations governing ALM in South Africa, its role in education and its adoption of information communication technology as enabler to provide education to various stakeholders.

### *Legislations*

The ALM alliance are mostly influenced by a legal mandate. The study conducted by Gibson et al. (2007) found that developed countries such as United States of America (USA) enacted legislations such as the Federal Museums and the Federal Public Records Act of 1838 and the Library Services Act of 1996 to promote the alliance of ALM functions. The congressional legislation on preservation of ALM being produced is the driving force behind the commitment towards cultural heritage management (Katre, 2012: 322). In the USA, the Institute of Museum and Library Services (IMLS) plays a role in promoting a culture of library and museum alliance through policy and National Leadership Grants (NLG) (Zaid and Abioye 2010: 62). In Britain, the Public Libraries and Museum Act of 1964 placed made local authorities responsible for ALM functions. According to Gibson et al. (2007) ALM enjoyed close links because municipalities had combined the functions of ALM.

Some of the developing countries have not enacted legislations governing ALM functions. In Nigeria, ALM functions alliance has not been enacted by legislation or policy (Zaid and Abioye, 2010). However, there was a recognition of ALM alliance through awareness and promotion. The survey conducted by Alegbelaye (2013) acknowledged the importance of ALM functions for promoting educational activities and teaching.

After South Africa gained democracy, there was a need to transform the role of ALM functions at KNP to serve the need of all South Africans (Netshakhuma, 2017). Post- apartheid SA had responsibilities to provide free and open access to information to all its citizens (Satgoor, 2015). The Constitution of the Republic of South Africa (Act 108 of 1996) articulates the right to information. In South Africa, the alliance of ALM has been promoted by legislations. For example, the SANParks mandate is underpinned

by section 24(b) of the Constitution of the Republic of South Africa, Act 108 of 1996 which requires secure ecologically sustainable development and use of natural resources while promoting access to information. According to Satgoor (2015) and Netshakhuma (2019f) ALM are managed under the National Library of South Africa Act (Act 2 of 1998), the Legal Deposit Act (54 of 1997), State Information Technology Agency Act (88 of 1998), the South African Library for the Blind Act (91 of 1998), the Public Finance Management Act (Act 1 of 1999), the National Council for Library and Information Services Act (6 0f 2001), the Education Laws Amendment Act 31 of 2007 and the Protection of Personal Information Act 4 of 2013), the Copyright Act (98 of 1978), the National Archives and Records Services Act (43 of 1996). In a nutshell, these legislations provide guidelines on a national preservation of ALM. These legislations aim to fulfil the provision of public education in SA (Gibson et al., 2007: 53). The legislations can influence the digital preservation initiatives at national level and the institutional policies (Katre, 2012). Legal framework is meant to provide the required mandate, decisions, financial support and commitment from the authorities for the digital preservation of information created by organisations.

### *Education*

According to Innocent (2009) the ALM functions recognise that provision of education and knowledge management is an essential function of the cultural management institutions. Satgoor (2015) found that the ALM functions provide the public with spaces for information and learning and are accessible to all groups in societies. The ALM functions play a role in the participation in society through lifelong learning. The aim and objectives of ALM do fit well in lifelong learning (Gibson et al., 2007). The ALM functions form an alliance with schools to provide education to society. Usherwood et al. (2005: 55) suggested that ALM functions are seen to perform a role of providing a context to education. ALM functions collect data in a variety of forms in an attempt to establish the efficiency of service, client use and satisfaction (Lo et al., 2014: 107). According to Sirinides and DuBois (2011) the ALM functions play a role in providing opportunities for teaching and learning. The role of ALM in supporting research and education is essential to societies (Lei, 2019). Most of the records found in the ALM are in different formats. Some of the records available in ALM are archival materials, artefacts and other kinds of information-bearing objects. The ARM is a component of the

information environment of any society and plays a critical role in connecting information resources and services with community (Caidi, 2005).

The ALM functions are emerging as community partners for a development and social transformation (Satgoor, 2015: 103). The ALM function in South Africa is being redefined as it continuously moves away from the recreational to educational activities. ALM are poised to participate in the development of an educated and engaged citizenry. The study by Usherwood et al. (2005) found that the ALM functions are perceived as having a value in recreational activities. Tourists visit the national parks as a way of enjoying all forms of nature and environment. According to Lo et al. (2014) the concerns for ALM are to provide a rich experience for the visitors and to engage the public in terms of their rich and exciting contents. The greatest concern for these institutions is to remain meaningful for future generations. ALM functions are to remain relevant to societies in which they reside and serve.

According to Innocent (2009) ALM functions play an essential role because of the following:

- engaging local spaces that a broad range of people feel comfortable in;
- not viewed as formal learning environments and so can re-engage people in learning both formally and informally;
- offering opportunities for individuals, groups and families to learn together throughout life and play an intergenerational role that has wider community benefits;
- places that not only support people to develop skills and knowledge but also lift people's spirits and build confidence.

Organisations are looking to ALM functions to play a role in providing children and families with access to high-quality learning experiences (Swan et al., 2013). There is a high need for information about current availability and accessibility of education opportunities of ALM functions (Sirinides et al., 2017).

The study conducted by Sirinides and DuBois (2017: 573) found that societies do not take advantage of ALM resources. The ALM functions seek alliances that offer needed implementation capacity, allow access to specialised learning activities and support local community engagement. According to Sirinides and DuBois (2017: 573) increased access to and benefits of early learning programmes in the ALM functions facilitate alliance among ALM functions and community education.

The study conducted by Duff et al. (2013: 5) found that alliance of ALM functions requires professional and research skills of information professionals. Hildreth (2006) found that alliance projects play an essential role to the benefit of stakeholders in providing information to the society. The qualifications of employees dealing with ALM functions are a challenge to these professions because of lack of qualifications and skills (Netshakhuma, 2019c; Novia, 2012). Librarians require a Master's degree in Library and Information Science, archivists or museum curators require a degree in History or Archival Science. Because of a lack of comprehensive ALM education, the ALM functions alliance became a challenge to identify the specific qualification required.

According to Satgoor (2015: 104) and Netshakhuma (2019h) there is wide-scale cognisance that the best way to address and support the transformation of ALM functions into community hubs is for the organisation to invest in staff development and training.

## Adoption of information communication technology

The need to improve competitiveness, innovation and creativity enhances the need to collect, manage and share information (Waibel and Erway 2009: 3). ALM functions are embracing ICTs to meet the needs of users (Lei, 2019). It seems that most of the youth prefer to use and to view most of the ICT ALM resources.

The development of ICT facilitates the use of ALM materials (Anderson, 2005). Digital technologies provide opportunities for the dissemination of ALM collections, better storage capabilities, preservation, better scope for circulation of public domain material and streamlined processes of classifying material. According to Chaterera (2015), the use of technologies as a communication tool has gained remarkable attention among scholars and researchers. Ngoepe and Ngulube (2011) suggested that some institutions are using Web 2.0 technologies to provide ALM functions to strengthen institutional relationships.

ALM functions must be aware of varying levels of ICT that hold the potential to enhance user experience when implemented across disciplines (Novia, 2012). An alliance effort on the part of ALM will provide open access to a wider range of records and artefacts. Cross-institutional alliances are impossible without the development of standards (Wythe, 2007).

The study conducted by Kalfatovic et al. (2008) on alliances of ALM was driven by the need to have a plan to embrace the social networking reality of the Web. The project posed a challenge with

technological changes caused by the development of technology. The digital project was successful because of the inclusion as members of the Chief Information Officer, Smithsonian Center for Education and Museums, Smithsonian Institution Archives, Smithsonian Institution Libraries and Smithsonian Photography initiatives. The lesson learned in the Smithsonian project includes increase of public knowledge and access to the Smithsonian digital collections, programmes, expertise and resources through the use of the Smithsonian collections.

The study conducted by Chaterera (2015) found that the utilisation of Web 2.0 in Zimbabwe ALM institutions is still in the early stages. The study recommended the formulation of policies and strategies that emphasise the use of Web 2.0 technologies. This implies that ICT will enhance collaboration between archives, libraries and museums.

Digitisation of ALM functions responds to the need of users to access various collections. Digital technology enables organisations to access various ALM collections (Netshakhuma, 2016). However, ALM functions are facing challenges in terms of continuing their function within a digital environment; they are also faced with new demands from new user groups who demand to access information (Anderson, 2005). The youth prefer to use advanced ICT to access archives, libraries and museums. The study conducted by Netshakhuma (2019d) indicated that social media is an essential mechanism for archivists to access archival materials.

Cultural heritage institutions realign their service delivery mechanisms to meet the user's expectation by providing broader networked access to collections and collection information (Timms, 2009: 68). Integrated, on-line access systems could exist both within single institutions and among institutions (Timms, 2009: 68). Most of the institutions are adopting the digitisation strategy to promote access to their collection (Jones, 2016: 220). Digitisation eliminates costs of physically visiting ALM institutions. The study conducted by Duff et al. (2013) found that the advent and broad implementation of digital technologies across the ALM sector had an impact on alliance and convergence initiatives amongst ALM. Digital technologies were seen as the platform for integrating media across information services. According to Duff et al. (2013) the collaborative projects at Archives New Zealand/National Library of New Zealand and Taylor Family library provide examples of institutions influenced by the form of coexistence to convergence. Digitisation of ALM products, processes and institutions from the creation of online catalogues to the emergence of born digital collections is opening a promising role for the

institutions and will raise issues and increase the profile of ALM (Caidi, 2006: 210).

The idea of an information environment in which the entire information is within the user's grasp is as old as the very urge to collect (Waibel and Erway, 2009: 3). This statement is alluded to by Kalfatovic et al. (2008) who indicated that the vision of unified access to ALM materials outlined provides a context for alliance among archives, libraries and museums.

According to Jones (2013), institutions cannot continue to rely on individuals as a means of maintaining key knowledge. Therefore, different ALM institutions have different perspectives on disseminating information. A connection between ALM presents these institutions with a shared environment where previously recipients of content are given the platform to exchange their thoughts with other patrons (Samouelian, 2009). Greater alliance between institutions whose primary task is to safeguard cultural heritage should be encouraged and promoted (Delaney et al., 2015).

The ALM alliance projects can be beneficial by raising awareness in the marketing impact to the larger community and raising the visibility of all organisations (Diamant-Cohen et al., 2003). Alliances on development of advanced technical infrastructure must be encouraged among departments (Delaney et al., 2015). This statement is also alluded to by Waibel and Erway (2009) who indicated that ICTs influence alliance globally. The ALM alliance offers institutions the opportunities to develop practical software and standards for broader content sharing (Rinehart, 2003).

Archivists, librarians and museum specialists need an alliance programme that ensures that its professional curatorial responsibilities are fulfilled (Pitti et al., 2015: 80). Accordingly, ALM alliance is influenced by the vision and mission statements of an organisation. ALM alliance must become part of the organisational mandate of any heritage institution. The mandate is supposed to outline an organisation's strategic plans. For an alliance's efforts to succeed, efforts should be made to ensure that incentives are to be in place from all organisational activities. Alliances can benefit from the presence of a 'change agent'. A change agent is someone who can influence and drive successful implementation of a project in an organisation. A change agent is supposed to be a trusted individual, department or programme that promotes cultural preservation. The change agent must be able to ensure that ideas, technology and staff are available to ensure that the project is successful (Waibel and Erway, 2009). The implementation of ALM alliances leads to changes of behaviours, processes

and organisational structure, and to an interconnectedness and interdependence among partners. According to Waibel and Erway (2009) the transformative activities are what will put ALM functions in a position to take advantage of economics as well as technology and so become a transformative force for the clients. The Web 2.0 is to challenge the authoritative role of librarians, archivists and museum curators as the main custodians of the narrative on world cultural heritage (Sanjuan and Menard, 2015: 250).

Digitisation policy encourages universal access and access to information. Digitisation seems to be a driver of alliance and convergence between ALM alliances (Klimaszewski, 2015). One goal of digitisation is the creation of a single point of access to digital materials. Digitisation is essential for both the preservation of cultural heritage objects and the preservation of the information about these objects, digital captures and related digital information (Netshakhuma, 2019b).

## Data analysis

The qualitative data are based on transcriptions of comments from the interviewees and document analysis made in response to the open-ended questions during the interviews. The data analyses are organised by the themes of legislations, education and role of technology on alliance of ALM functions.

### Legislations

The participants 100% were asked whether they were aware of legislations governing ALM in SA (see Table 2). The majority of participants, seven (70%) indicated that they were not aware of legislations governing ALM in SA. Most of the participants who were not aware of the legislations were staff from lower levels such as archives assistants, records officers, assistant librarians and people and conservation officers. Only three (30%) said that they were aware of legislations governing of ALM. Most of those staff who were aware of the legislations governing the ALM were Records Manager and Heritage Manager. The legislations which were mentioned by most of the participants included the National Archives and Records Service Act 43 of 1996 and The Legal Deposit Act (54 of 1997). This was so because managers and programme heads had a background of working in an ALM environment.

### Education

The participants were asked about any role the ALM play in education (see Table 3). The majority of

**Table 2.** Awareness of legislation governing ALM.

| Response | | |
| --- | --- | --- |
| Aware of the ALM legislations | 3 | 30% |
| Not aware of ALM legislations | 7 | 70% |

**Table 3.** Role of ALM in education.

| Participants' response | Yes | No |
| --- | --- | --- |
| Number and percentage of response | 8 (80%) | 2 (20%) |

**Table 4.** To what extent do ALM offer programmes for community education.

| Number of participants | Programmes |
| --- | --- |
| 5 (50% | Exhibition |
| 2 (20%) | Research, storytelling, arts and crafts |
| 3 (30%) | Annual events |

participants (8, 80%) indicated that they valued the importance of education while two (20%) indicated that they did not view ALM as important in terms of providing education and learning activities. The fact that record officers, assistant librarians and archives assistants were appointed without or with only a Grade 12 school certificate implies that they could not value the importance of education. This finding showed the importance and effectiveness of education in offering educational activities in the ALM programme.

The SHRC contributed on offering innovative and unusual programmes out in the community by identifying a community location, developing a structure for the programme. It is about ALM as part of the broader social and cultural landscape of a society that information culture can and will change (Caidi, 2005).

When participants were asked to respond to the following questions, to what extent do ALM offer programmes for community education?, What is the nature and type of the programming that currently exists?, five participants (50%) stated that information was provided through exhibitions (see Table 4). Five participants (50%) indicated that there was a permanent exhibition of storytelling in the KNP where tourists or visitors could view the exhibition. Three participants (30%) indicated that most of the visitors visited the ALM during an annual event such as the national library week, the archives week, the

heritage days and other special days organised by the national or provincial Department of Arts and Culture, National Archives and Records Service of South Africa (NARSSA). In terms of the types of programming offered, archives and libraries mentioned story time, museums mentioned a range of activities such as an exhibition. The focus of these activities was targeted at various communities to ensure dissemination of information to various stakeholders.

To what extent do alliances support programming for community development? The data collection indicated a limited number of alliance activities that supported community development. Although some of the participants reported that ALM alliance supported the initiative for community development, some participants that did report partnerships found them to be important for providing a service to the KNP community.

Participants were asked to identify areas where they felt ALM alliance would be useful for community development (see Table 5). Five participants (50%) indicated that alliance between KNP and universities such as the University of Mpumalanga, the University of Pretoria and the University of South Africa contributed to community education. The success of a universities and KNP alliance is viewed as a future trend that will assist to solve the issues, controversies and problems surrounding who creates digital heritage content, who has access to it, and for what purposes (Van der Elst et al., 2011: 152). The review of document analysis found that KNP entered into a memorandum of understanding with various universities for research, education, leisure education and promotion of knowledge management. This finding shows that there is a link between ALM and the syllabus of universities. Three participants (30%) indicated that there is education programme which encourages learners to visit KNP to learn about South African history and heritage. This finding shows a link between ALM and other various educational activities in education. Two participants (20%) expressed that they do not believe that the information resources are places for educational activities.

It was important to understand the importance of the ALM programme. The participants were given opportunities to share their experience on information management. What were the challenges that Information Services face in designing and implementing education programming for community development?

Participants were asked to indicate challenges experienced in providing education to the public (see Table 6). The majority of participants (8, 80%) indicated that lack of funding for ALM activities was cited as the major challenge for the development of

**Table 5.** Areas of community education alliance.

| Participants | Area of participants |
| --- | --- |
| 5 (50%) | Universities |
| 3 (30%) | Schools (primary and secondary), |
| 2 (20%) | Not a learning activity |

**Table 6.** Challenges of ALM in South Africa.

| Participants | Challenges |
| --- | --- |
| 8 (80%) | Funding |
| 2 (20%) | Skills and competencies |

**Table 7.** Level of education.

| Level of education | Participants |
| --- | --- |
| Participants with Honours degree and above | None |
| Participants with junior degree | 4 (40%) qualification in Archives Management and Library and Information |
| Participants with Matric and equivalent qualification | 5 (50%) |
| Participants without Matric qualification | I (10%) |

programmes. Two participants (20%) indicated lack of community development skills with regard to the development of ALM. One of the participants said that 'there is a lack of staff to develop and implement an effective ALM programme'.

The participants were asked to state their level of education. Table 7 shows that there is lack of staff with skills and knowledge to manage ALM. The researcher found that all participants lacked qualifications ranging from an Honours degree to Doctoral level. However, the study found that there are efforts made by KNP to capacitate staff from all levels in order to improve their educational level. At the time of the interview, there were two participants who were studying towards an Honours qualification in Information Science with the University of South Africa. However, the fact that there were staff who were managing museum functions without appropriate qualifications was a major concern for the researcher. A majority of participants (5, 50%) were in possession of a matric qualification and equivalent qualification. The study found that only four (40%) participants possessed a qualification in Archives Management and Library and Information Management. Hence only one (10%) of the staff members was without a matric qualification. The finding shows

that the educational qualification has an impact on the development and implementation of ALM functions. These results imply a link between the level of education and the implementation of ALM programme.

The 10 (100%) participants were asked to mention any activities which will be offered by the ALM institution in the future (see Table 8). The majority of participants (6, 60%) mentioned that they 'play games for kids' as the activities to be included in the KNP to encourage participants to visit the park. Four participants (40%) mentioned that the introduction of gift shops would enable the participants to visit the park. This result implies that SANParks is to develop various programmes to encourage people to visit the national park.

## Adoption of information communication technology

It was in the interest of this study to find out challenges hindering the ALM in KNP from fully adopting technology to provide access to information.

All the participants (100%) were asked what is it that has brought ALM close together over the period and allowed KNP to develop alliance techniques and projects (see Table 9). Five participants (50%) indicated that they shared a central core of professional skills and tenets. Half of the participants (5, 50%) indicated that they embraced ICT as a means of encouraging access to information. Of the participants 30% said that the KNP was not involved in the collaborative activities within national parks systems. The KNP lack an inter-department relations policy which is a barrier to collaboration among departments. The SANParks is to review their organisational structure to ensure that archives, museums and libraries report to a general manager: heritage management. Furthermore, staff are to attend courses which will enable them to understand concepts of managing heritage sector. Two participants (20%) did not respond to the question.

The participants were asked their level of skills and competences with regard to digitisation and technology (see Table 10). The researcher found that a majority of participants (8, 80%) possessed basic skills in ICT, while only two (20%) had advanced skills in technology. The findings show that staff lack skills in the management of digital technology. The analysis of information through observation found that there is online presence and use of digital media by museums. It was essential that museums should operate according to the mission of the parent organisation. The data analysis found that indeed there is a challenge for the development of technology, society expectations and operating environments.

**Table 8.** Future activities to be included in the ALM.

| Participants | Responses |
| --- | --- |
| 6 (60%) | Playing games for kids |
| 4 (40%) | Shops |

**Table 9.** Alliance of ALM.

| Response | Frequency | Percent |
| --- | --- | --- |
| Does not collaborate | 3 | 30 |
| No response | 2 | 20 |
| Alliance | 5 | 50 |

**Table 10.** Skills and expertise in digital technologies.

| Participants | Reponses |
| --- | --- |
| 8 (80%) | Basics skills in ICT |
| 2 (20%) | Advanced skills in technology |

## Findings

The qualitative results are based on transcriptions of comments from the interviewee and document analysis made in response to the open-ended questions during the interviews. The results and findings are organised by the theme of legislations, education and role of technology on alliance.

## Legislations

As indicated in the research results, the majority of the participants who deal with ALM functions are not aware of most of the legislation governing ALM in KNP. The researcher found that most of the participants are not aware of the National Library of South Africa Act (Act 2 of 1998), the State Information Technology Agency Act (88 of 1998), the South African Library for the Blind Act (91 of 1998), the Public Finance Management Act (Act 1 of 1999 as amended by Act 29 of 1991), the National Council for Library and Information Services Act (6 0f 2001), the Education Laws Amendment Act 31 of 2007 and the Protection of Personal Information Act 4 of 2013) and the Copyright Act (98 of 1978). This finding is in agreement with Popoola (2003), Wamukoya and Mutula (2005), Olatokun (2008) and Netshakhuma (2019a and 2019b) who indicated that the increasing deterioration, lack of coordination in handling records, absence of policies and procedures were cited as the major challenges to preservation of ALM functions in Sub-Saharan Africa. This is a concern with regard to

the implementation of ALM programmes in KNP. Lack of awareness of legislations may be contributed to by the lack of awareness and training by the resource centre. The fact that most of the staff in lower positions lack academic qualifications means that they could not interpret and analyse the legal framework governing ALM.

### Education

It appears as if the ALM functions are not perceived as a source of formal education. The fact that SHRC can cater to a variety of educational activities and need is not highly valued. There are a smaller number of South Africans who visited SHRC compared to the international visitors. The high number of the international visitors can be attributed to access to resources through the Internet and other platforms. The researcher assumed that the majority of South Africans failed to visit ALM because of lack of access to resources. It appears that most of the participants viewed ALM functions as the information related to the apartheid period and considered that it only served the minority group in South Africa.

The analysis of KNP annual reports found that KNP initiated programmes such as the library week, the archives week, the People and Parks, the Kids in Parks and the museum week to encourage the community to visit ALM for lifelong learning to supplement formal education. According to Ledwaba (2016: 8), the project of taking the library to local schools started in KNP in 2011. South Africa library week is one of the platforms for libraries to market their services and reach out to communities. The purpose of visiting communities was to encourage learners to read and create awareness on the importance of using libraries, archives and museums.

Through the KNP outreach programme, the disadvantaged communities such as black communities were able to visit and access the ALM resources free of charge. KNP recognised that historically, the legacy of KNP has led to a situation where not all sectors of society have the sense of loyalty and belonging that is felt by the traditional visitor base to the park. KNP recognises its potential to play a role as a national symbol and to contribute to social cohesion in society. At the period of writing this article, KNP is implementing a comprehensive environmental education programme which sees over 100,000 learners participating annually. KNP aims to grow the number of learners participating in these programmes by 2.0% per annum to the year 2030.

It appears that the South African Government believes that ALM functions should play a role in social inclusion and lifelong learning. The researcher believes that ALM functions can contribute to educating South Africa and the rest of the world community. The interviews with the participants found that ALM functions were important as they contribute to people's enjoyment and inspiration, cultural values, learning potential of the organisation and economic prosperity.

The SHRC has a unique local presence and capacity to promote learning opportunities in both urban and rural communities. It was found that most of the communities are not taking opportunities of KNP resources to build communities. It was found that people who visited the SHRC were prepared to use resources for capacity building. This study found the SHRC seeks partnerships that offer much needed implementation capacity, guidance in using best practices, access to education and support for community engagement. The learning programme within the SANParks gave an opportunity for everyone to fully participate.

### Adoption of information communication technology

The long-term preservation of ALM resources was regarded as the major challenge for those who were interviewed because most of ALM has different formats and contents. This was so because of high pressure with regard to capturing, maintaining and preserving a rapidly growing body of information resources. The lack of a collection management policy has an impact on the development and implementation of a digitisation process because ALM resources are unique and require different formats and structures to be preserved. A plan is to be put in place for an internal alliance of departments within the KNP to enhance access to information to ALM collections through the introduction of the electronic content management system. This statement is alluded to by Netshakhuma (2018a, 2018b, 2019) who indicated that the introduction of an electronic content management system and business management process enhances access to information.

Aspects of capacity building in ALM deserve urgent attention from the KNP. This means that management are to be encouraged to learn new skills in the preservation of artefacts and modern technology. However, some of the participants felt that alliance efforts for ALM may be a threat to autonomous or unique tradition of ALM professions. The researcher assumed that technology will enhance users' ability to differentiate between archives, museums and libraries.

## Recommendations

Based on the findings, the researcher recommends the following:

❖ The Department of South Africa Higher Education and Training should consider introducing field trips to Kruger National Park as part of educational activities to promote the use of ALM.

❖ The KNP needs to adopt a pro-active stance towards community outreach and development. Communities should benefit from the ALM programme. Such initiatives will encourage communities to visit SANParks for educational purposes and other activities.

❖ ALM functions should strive to remain relevant and meaningful to the South African society and meaningful to the society they purport to serve.

❖ Organisations should develop a collection management policy to drive the management information resources.

❖ The KNP should provide scholarships for young people to study history and cultural heritage in order to promote preservation and conservation of national parks system.

❖ KNP to involve in digitisation projects to ensure that museums, libraries and archives resources are used to their maximum.

❖ Alliance initiatives should be aligned with institutional priorities, resource investment and professional responsibilities are important to success for cross-disciplinary and collaborative professional development.

❖ ALM should continually work to seek opportunities to collaborate and cultivate relationships to enhance patron experience.

## Conclusion

ALM forms an essential part of the country's memory hence there are legislations enacted to preserve and educate the nation about the importance of ALM functions. The ALM functions help in bridging the past and the present and in the shaping of the country. It seems that ALM were deemed to have been neglected by KNP and to suffer from lack of leadership and coordination. Linking all ALM offered by KNP will create positivity with cultural heritage. The technological innovation process in the ALM sector is to be marked by interoperability, use of ontologies, multimedia, mobile and wireless technologies and web design functionality and usability, accessibility and ambient intelligence. The low use of technologies in KNP is related to the fragmentation of the national parks and the features that characterise them, such as lack of budget, lack of awareness of ICT benefits, lack of skills and capabilities. The lack of assistance and accompaniment for organisations facing the process of technology adoption. The KNP mission is to develop a public private alliance that delivers the benefits of a network system to the national system within a sound commercial business model.

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