

Learning from the Challenges of the past and Readying a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association

**Lopang MAPHALE, Jakoba KGOPOLELO, Wilson MHURI, and Olebogeng MOLEFHI,
Botswana**

Keywords: Association, Profession, Professionals, Challenges, Geomatics, Opportunities

SUMMARY

This summarizes the paper on the ups and down of a geomatics professional association in Botswana over the ages since 2001. Despite the registration of the Botswana Surveying and Mapping Association (BSMA) in 2001, the geomatics professional community in Botswana had continued without a professional body that can address their various impending challenges and interests up to 2013. The BSMA started well in its inception with around 40 members and successfully joining the International Federation of Surveyors (FIG). These numbers were quite high then but they kept dwindling to its near collapse in the recent years and in the process the association could not keep its place within FIG community because of failure to pay membership fees and playing any meaningful role in FIG activities. In the mist of these challenges a group of few professional surveyors continued to hold some hope for a professional body through several and varied revival processes. They managed to make an achievement on 18 October 2013 by holding a well attended meeting by geomatics professionals in Botswana where a new Executive Committee was elected through a ballot as directed by the constitution of BSMA. This in the short term suggests that BSMA had been resurrected but then in the long term things were not so clear. It is the long term which the newly elected committee of the BSMA had to tackle and come up with a useful road map. The purpose of this paper is to summarize the various efforts which were made in reviving a fading BSMA and then go on to put forward the road map suggestion to aid BSMA's growth into the future. In doing this a major paradigm shift will be considered whereby the geomatics professionals are taken to be key players in multi-disciplinary teams of decision makers on any country's economy, working within the geo-spatial realms to ensure security and continuity in fundamental national assets, land. This concept takes into great appreciation all stakeholders and suppliers of geomatics products and services in the broader context of the national economy and beyond. The paper will then go onto conclude that looking into the future the geomatics opportunities in Botswana are boundless and they can only be better exploited through an organized professional body. This means that BSMA should this time around succeed in its endeavours.

Learning from the Challenges of the Past and Readying a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)
Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

Learning from the Challenges of the past and Readying a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association

**Lopang MAPHALE, Jakoba KGOPOLELO, Wilson MHURI, and Olebogeng MOLEFHI,
Botswana**

1.0 INTRODUCTION

Botswana Surveying and Mapping Association (BSMA) was formerly registered on 21 August 2001 by the Botswana Registrar of Societies following various efforts of consultation by the then professionals. Its founding constitution categorically states its objects as the following;

- a) *Measuring and delineating the physical features of the earth, and representing these in an appropriate manner both in hard copy format and in digital format.*
- b) *Surveying properties for purposes of deeds registration.*
- c) *Promotion of interest in surveying and mapping and to enhance the usefulness of these Professions to the public.*
- d) *Furthering technical and professional knowledge in these fields thereby improving the ability of members to provide competent and valuable service.*
- e) *To promote honourable practice by the control and exercise of discipline over the professional conduct of members.*
- f) *To establish and to update from time to time or as may be necessary a scale or scales of fees, in respect of :-*
 - (i) *Engineering and Topographical Surveying.*
 - (ii) *Cadastral Surveying. The committee shall have the power to determine the format of the fee scales having regard to the needs of both disciplines.*
- g) *To set and to modify as may be necessary the qualifications required for membership within the various grades and disciplines of the association.*

It can be depicted from the above objects that at its formation the BSMA did have some vision and mission of some measurable degree. The intention of this paper is to look at this association over the ages in order to appreciate its achievements and challenges as it seeks to establish itself as a recognizable professional body in the geomatics industry in Botswana.

2.0 THE BSMA THROUGH THE AGES

After registration BSMA did get off and it attracted about 40 members who were substantially private land surveyors and a few government land surveyors. Over the years since 2001 the association lost a great deal of its founding members and from 2006 onwards it was in a free fall as the elected committee could not function effectively. The Memberships were also not renewed which technically meant that the association began to exist in name only. The association started losing all the gains it had achieved, for instance its membership to Federation

Learning from the Challenges of the Past and Readying a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)
Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

of International Surveyors (FIG) was suspended, and its monthly newsletter discontinued. In the eyes of many this signified failure but to a few others it provided an opportunity to introspect.

2.1 The BSMA Organisational Structure

The fundamental structures of this association are Annual General Meetings, Special General Meetings, Executive Committee and Chapters. The Executive Committee headed by the Chairman is selected through a ballot at Annual General Meeting and then Chapters are meant to promote geomatics outlook in Botswana are as follows;

- Cadastral Surveying
- Cartography, Remote Sensing and Geographical Information Systems (GIS)
- Engineering, Topographical and Mine Surveying

The Executive Committee is responsible for the running of the BSMA with a specific mandate of affiliating it to FIG and any other fraternal organizations of interest. The three Chapters on the other hand had the responsibility of establishing their committees and had to grow their own base which if added together they form the whole which is BSMA. The membership could come from any professionals who have principally qualified or are studying in the areas relating to the Chapters. In the scheme of membership there are six gradings which are; Fellow, Professional, Technical, Honorary, Probationer and Student members (BSMA constitution, 2001).

2.2 The Paradigm

The paradigm concept has been studied by many scholars in the area of sociology but this paper will like to take a cue in Eckberg and Hill Jr. (1979) when they say “a paradigm pre-supposes an integrated community of practitioners”. In Botswana, in the area of geomatics a paradigm has been created and it can be distilled from three major spheres of its influence. In the first instance, prior and after the independence period, the geomatics profession has been largely influenced and shaped by government in Botswana. At the centre of geomatics operations and administration it has been the Department of Surveys and Mapping, which in fairness had provided a place of work and trained many surveyors during the years 1970 to 2000. It played a defining role in the formation of the professional association and it is not surprising that in its inception the founders of the association named it Botswana Surveying and Mapping Association. This arrangement has created a paradigm that has proved difficult to depart from.

In this paradigm Department of Surveys and Mapping has in line with the provisions of the Land Survey Act of the Republic of Botswana showed interest in only semi-regulating those who would want to practice as Land Surveyors for cadastral purposes only. As for the rest of the specialization areas specified under BSMA chapters there was no form of regulation and this opened up the profession for everyone who can collect spatial data. This was compounded more by the arrival of new technological equipment in particular Global Positioning Systems (GPS) which allowed one to collect spatial data without much help from land surveyors. A number of new generation professionals who qualified in areas such as GIS felt that the association was not suitable to them and found no reason of joining it. Some have queried about the name feeling

Learning from the Challenges of the Past and Readyng a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)

Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

that it was not representative of their professional outlook, this constitute the second dimension of the paradigm.

The third dimension of the paradigm manifested itself into BSMA not attracting many members due to a lack of a professional regulatory framework. The professional regulatory framework could force prospective members into line by addressing bread and butter issues such as being a member of a professional body to be recognized for employment and consultancy work. The other fundamental ingredient in this paradigm became the government professional versus private practitioners. Central to this one was the aspect of benefits that can be derived from BSMA. Many in government felt that BSMA was in fact a lobby platform for private professional land survey practitioners and they have all along never really find anything enticing enough to belong to it. In all a good number of professional geomatics practitioners have continued to label BSMA as a spineless organization and have failed to join it in numbers.

The lines of thinking outlined above were to become a major stumbling block for BSMA as the founding members and prospective members became indifferent over the years leading to a number of challenges which needed resoluteness and another way of thinking to go forward. What is generally termed “paradigm shift” by scholars had become a necessity.

2.3 BSMA Challenges

As mentioned in the introduction BSMA took off well but then it was soon to be faced with some insurmountable challenges owing to the articulated paradigm. Some of the most prominent ones which have emerged at different fora are listed below;

- Low membership
- Indifferent members and prospective-member commitment
- Unpaid subscription fees by members for a period of at least over 7 years
- Lack of sustained financial resources
- Poor turnout to meetings which rendered the association inactive
- Lack of self-regulation
- Lack of Visibility
- Lack of legal muscle
- Lack of vision and strategic direction

Almost all of these challenges have been acknowledged by most members and prospective members in discussions which have often occurred when ever they meet in an enabling environment. A lot of these challenges have actually been discussed in Tembo and Nkwaе (2012), in which it has been reported that the association had attracted only about 9% of its professional Land surveyor’s population, excluding those in the allied professions.

2.4 The Role of Department of Surveys and Mapping

The Department of Surveys and Mapping (DSM) has existed as the main stop for all geomatics goods and services in the country. In keeping with its mandate DSM occasionally invite all the surveyors and other geomatics professionals to stakeholder workshops. These workshops had often given geomatics professionals particularly land surveyors a platform to discuss on what they consider pertinent issues. One such meeting was held on the 22 February 2013 at Gaborone Maharaj Conference Centre where challenges affecting the geomatics profession were discussed and the need for a functioning professional body was identified as a way forward. Suggestion to form a new association which is considered all inclusive of the professions were advanced and a counter of reviving BSMA was also advanced. In discussion it was agreed that a revival approach was more realistic and a working committee chaired by Land Surveyor Lopang Maphale was tasked with the efforts. This was considered important because in terms of the professional landscape and implementation of the revised Land Survey Act of 2011 it was important for the association to be alive and functional. In Land Survey Act revision, Botswana Surveying and Mapping Association had been mandated with selecting two representatives to the newly established Botswana Land Survey Council. In the event that BSMA fail to appoint the two required private land surveyors, then the Minister of Lands and Housing with the help of the Director of Surveys and Mapping would be free to carry out the appointment of any two private practicing Land Surveyors. If this was to happen then it will be like further compounding the existing paradigm.

The working committee carried out its work by consulting various geomatics professionals in all the economic spheres of the country. Its major drive was to work on the challenges of BSMA membership and it started by posting out letters to various geomatics experts across the country. The committee also decided to place adverts on local news papers soliciting for prospective members to attend a planned BSMA activity. Once the marketing work was done the committee decided on a Special General Meeting for the BSMA to be held on the 18th of October 2013. The attendance at this meeting was considered good as over 80 people attended. The meeting was held and the structures of BSMA were re-established, starting with the selection of the Executive Committee through a ballot. The Special General Meeting further sanctioned the committee to revive the chapter structures of the Association and go onto arrange an Annual General Meeting in 2014.

3.0 THE WORK OF THE NEW BSMA COMMITTEE

To understand the work of BSMA Executive Committee one needs to appreciate an area in sociology known as “positive deviance”, Spreitzer and Sonenshein (2004). In assuming its work the new committee looked at all the points that are influential to the paradigm set out in this paper, but then the committee decided to adopt a positive attitude to all challenges. The Executive Committee used more of their spare time to engage on the fundamental requirements of improving the standing of BSMA which was a marked deviation from the work of the previous committees. The committee adopted the strategy of crying less and confronting certain challenges head on in order to create a viable space for a geomatics practitioner in Botswana.

Learning from the Challenges of the Past and Readyng a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)

Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

Though BSMA did not have any positive financial resources on assumption of duty by this Executive Committee, it went on to promulgate targets which were running into thousands of Botswana Pula and they are listed below;

1. To re-register BSMA with FIG
2. To increase the BSMA membership
3. To Establish the BSMA Chapters
4. To come with a Regulatory Framework
5. To coin a Road Map for BSMA

This paper will go onto elaborate on the above points and specifically show what the Executive Committee did since it was elected into office in October 2013 in order to change the BSMA situation from negative to positive within a period of a year. In the words of the committee they have done what Spreitzer and Sonenshein (2004) describe as focusing on honorable intentions without necessarily worrying about the outcomes. Spreitzer and Sonenshein (2004) summed it well for the Executive Committee when they say “we consider intentions the important criterion for positive deviance, and not outcomes.” This approach has become the *modus operandi* for moving BSMA forward. This approach has produced positive results as it will be shown in discussing the above targets in their order.

3.1 Re-Admission with FIG

The membership to FIG is one of the fundamental mandates of BSMA. This task was also highly realized by the Executive Committee as one of the important vehicle which can give BSMA international visibility and credibility local. In that regard discussion were opened with FIG for BSMA to be re-admitted to its fold and this was successful because at its meeting in Malaysia 2014 this was done. The BSMA is now a member of FIG and going forward it is going to participate in its activities. Working within FIG the association should aim to become a vehicle for networking opportunities, awareness, education, publications and provider of Continued Professional Development (CPD) in the Botswana geomatics industry. BSMA should provide support systems focused at mentoring and coaching all its chapter members to become better professionals. It has to keep track of all relevant international events, national legislative and administrative developments that could have an impact on the specific chapters of BSMA. In the long term BSMA should see itself as a leading civic community organization that plays vital roles in tertiary geomatics course accreditations, providing of scholarships and playing a pivotal role in charitable events of communities in Botswana.

3.2 The BSMA Chapters

Chapters have been provided for in BSMA and largely tasked with the responsibility of identifying and developing quality activities in the area they serve and in turn promote the activities to chapter members. The committee tasked a number of members to come up with working documents which will lead to establishment of the required chapters for BSMA. This approach allowed a number of members to be involved with the BSMA’s efforts in a number of fronts. The chapters were considered important because they in a big way truly capture a

Learning from the Challenges of the Past and Readyng a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)

Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

number of areas which are in Geomatics. If well developed they could go a long way in creating a positive paradigm shift so as to correct the perceptions related to the name Botswana Surveys and Mapping Association. Areas such as GIS, Remote Sensing could be addressed and their role put into proper perspective in geomatics practice in Botswana in the realm of BSMA. In the write up of this paper, this work is still in progress. It is a slow process which requires a lot of patience, commitment and strong will from all those who are involved, continued support and encouragement are cornerstone to success.

3.4 The Geomatics Regulatory Framework

Though regulation can mean a lot of things to many people this paper realizes the definition from The UK National Consumer Council (2002) which says “Regulation of any kind is a means to an end, not an end in itself. It provides a means of achieving defined goals, by adopting rules directed at shaping conduct or controlling behaviour in some way, and then putting machinery in place to enforce those rules”. The professional regulatory framework has been realized as the missing link in all activities of geomatics professional services in Botswana albeit the Land Survey Act. The Botswana Land Survey Act does not provide a requisite regulation framework and in today’s technological advancements in geomatics it has become highly inadequate in that regard. As such the professionals are not readily brought to account for their practice in a responsible manner in relation to the public that they serve. In Tembo and Nkwa (2012) they have opined on this issue when comparing the BSMA to Nigerian practice and have come to conclude that BSMA does not have a requisite regulatory framework that can act as stimulant for its prospective members to join it.

In recognition of the foregoing the Executive Committee has suggested a number of regulatory instruments being; establishment of the Practitioners’ Act, Professional Code of Conduct and Professional Tariff Schedule that can guide the pricing of geomatics services and products. In this model the government should come up with the framework and the professional body should be the implementer of all the requirements associated with the framework. This model has been found to be very viable over a 100 year period in the UK, and in acknowledging this model The UK Inter professional Group (2002) has emphasized the need for professional competency and public protection to be the pillars. In our research work we had come to similar conclusion and we find this to be much so in our times where technological developments have overtaken the profession as spatial coordinates and maps can easily be obtained with much ease by many. Another form of regulation recognized to be useful for BSMA is the South African model which according to Coetzee, Rautenbach and du Plessis (2014) was instituted in 1984 through an act of parliament. A code of conduct is said to be at the centre of this framework and according to these authors it is “to protect the interest of the public and to offer recourse in the form of disciplinary hearings and sanctions”. This is lacking in our environment but suffice is to say that even South African geomatics professionals often come to do work in Botswana. It will be good to bench mark against them and then come up with a regulatory framework that will be fit for the Botswana environment.

Learning from the Challenges of the Past and Readyng a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)

Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

3.5 The Road Map

According to Khan (2013) it is inevitable that associations need to be transformed in order for them to meet the demands of the future driven by technological innovation and change. The BSMA new committee has also come to the realization that BSMA was faced with great challenges of not being identified as a reputable and meaningful institution towards the socio-economic development of Botswana. This is despite the fact that the contribution of a professional body like BSMA is highly desired in any country. The committee concluded that a road map for BSMA was needed but as a starting point the committee focused on finding ways and means of communicating with members/potential members as well as the general public in order to make itself relevant. In that spirit it was further concluded that all stakeholders should be able to relate with BSMA and appreciate the value it adds to the development of Botswana. This necessitated the development of what the committee preferred to term “BSMA Publicity Strategy”.

The BSMA publicity strategy is premised on addressing the following issues:

- 1) Membership
- 2) Public awareness and education
- 3) Corporate relations
- 4) Communication gap

The intention of this strategy was to be able to foster change and deliver what Hannah et al (2008) has defined as “well defined sense of future direction and a clear plan as to what to change and how to manage that change”. Hannah et al (2008) addressed these issues in their paper which clearly emphasized the need to remain relevant of land survey and related professions in the recent times and into the future in the mist of heavy influence by technology. In addressing the challenges related to using the name geomatics as opposed to surveying Hannah et al (2008) made a telling statement that “changing names is not a panacea for all problems” and in addressing the paradigm created we adopt this school of thought. They rather put forth what they call “focused and coordinated marketing” as a solution of dealing with what could be considered to be existing paradigms and the Executive Committee have opted for this as a way forward.

3.5.1 Membership

The target membership of BSMA was found to be mainly in the government sector and parastatals, with the second largest group in the private sector and last but not least educators and students in universities and colleges. In consideration of this, it was concluded it should be put within the associations mandate to see to it that all relevant people are members so that they help drive its interests going forward. After careful considerations it was discovered that, one of the major stumbling blocks is the lack of clearly outlined benefits of being a member of BSMA. In that light committee advocates strongly for benefits packages that can be easily distinct and appealing to members. The following benefits packages were identified as a starting point:

Learning from the Challenges of the Past and Readyng a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)

Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

FIG Working Week 2015

From the Wisdom of the Ages to the Challenges of the Modern World

Sofia, Bulgaria, 17-21 May 2015

- (i) **Subsidized training:** With new survey technologies emerging there is a need for refresher courses and the association should be seen to be in the forefront of advancing skills development and building competencies. The training envisaged here is in the order of Continued Professional Development (CPD).
- (ii) **Internship:** Students members undertaking geomatics training should be afforded the opportunity to train as interns in private companies owned by association members. In addition being a member should be made into a flagship for employment and better opportunities.
- (iii) **Professional Indemnity Insurance (PII):** Botswana Land Survey Act (Section 8) requires surveyors to commit to their work, but then issues of professional mistakes can never be ruled out. In line with this it has been proposed that BSMA should identify a reputable insurance company and negotiate a deal for a PII for its members.
- (iv) **Survey Tariffs:** The parliament of Botswana had realized the importance of these tariffs earlier on by including them in the Land Survey Act, but owing to the time that it takes to review the act changing them had proved cumbersome. In order to address anomalies associated with this point, BSMA Executive committee did a small study by checking on public tenders of 2014 in the area of provision of professional land survey services. In all five different tenders were sampled at the time of opening and the values were collated and compared. In these tenders a lot of situations arose whereby there were price differences so enormous that they were up to five times apart for a similar survey job. Such a situation becomes a predicament even to government who is the main consumer of survey services. In another instance, one government ministry recently also expressed the interest to be shown the basis of topographic survey charges. It is the view of the committee that survey tariffs have to be brought back as the current prevailing procurement prices of surveyors' leaves a lot to be desired. Therefore the committee is in the drive to talk with government and all the interested stakeholders to bring back the survey tariff.

These benefits have to be used as building blocks in the short term with the intention of a nationwide marketing of the BSMA to its members and prospective members in relation to the benefits.

3.5.2 Public Awareness and Education

The association recognizes the importance of the general public, it is therefore of paramount importance that the public is well educated on how to benefit from the association and the profession at large. All communication gaps between the association and the public should be closed. The public should feel well represented by the association. Clearly outlined roles of the association ought to be communicated to the general public. The association should also engage the general public for service standards and fair pricing. The following have been considered to be of high priority in relation to general public education in Botswana:

Learning from the Challenges of the Past and Readyng a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)

Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

- (i) **Quality products/services:** The association should educate members of the public on what kind of services to expect from geomatics experts, and also the expected quality. These will also include an education in expected turnaround times. Measures should also be put in place to reprimand geomatics experts who offer an unacceptable and unjustified poor service.
- (ii) **Fair pricing:** The association would see to it that a pricelist is developed for products expected to be offered by geomatics experts and such a pricelist should be communicated with the general public through various media including print media. The pricelist would be compiled based on the parameters stated in the survey tariff of 1993 and comparable values of these services elsewhere, looking at the South African rates in particular. Agent based pricing of geomatics services like it happens in most government capital projects would be discouraged as it inhibits professional advancement and at worst lead to over-pricing of these services by agent organisations.

3.5.3 Corporate Relations

According to Mosaik Strategies (2008) corporate relations means “any potentially sustainable relationship between a company and a nonprofit organization providing value to both”. In practice these kinds of relations are mostly originated by the no-profit organization like BSMA and the ultimate intention is to access what is termed “corporate sponsorship”. Geomatics experts have a lot of stakeholders who utilizes services related to the profession; therefore key stakeholders should be identified, rated according to their relevance to the activities of the association and professional relationships developed in spirit of corporate relations. BSMA positive contribution in that regard should be felt and appreciated by other stakeholders in all issues pertaining to the Geomatics profession. For a start the following organizations are considered pertinent;

- (i) **Department of Surveys and Mapping:** This government department has always remained important to the activities of geomatics profession in Botswana and collaboration with it is expected to bear positive results in the short and long term. The committee has purposely put it on spot number one in its corporate relations endeavour.
- (ii) **Botswana Bureau of Standards (BOBS):** There is need to collaborate with BOBS to create an ISO standard for geomatics products in Botswana. The lack of standardized products makes service delivery as well as the final products highly unpredictable and less competitive in the international arena. One will acknowledge the lack of metadata in our mapping products and this can be attributed to lack of well defined standards.
- (iii) **Department of Roads:** BSMA Executive Committee members got themselves involved with this department’s work on the Roads Survey Manual and they made a positive contribution to the working document. Positive collaborations are anticipated with this department into the future.
- (iv) **Botswana Qualification Authority (BQA):** This is the organization which deals with accreditation of all qualifications in Botswana and as it was alluded to earlier this should

be the playing field for BSMA. Positive collaboration efforts should be opened with this organization to facilitate various processes and levels of accreditation.

- (v) ***Botswana Confederation of Commerce, Industry and Manpower (BOCCIM)***: The association should make it its mandate to introduce itself to the corporate world as well as to educate its stakeholders on its value addition towards these stakeholders. The association should also exploit solutions that will make it impossible for people who are not members to be able to render Geomatics services anyhow they want. In BOCCIM there is what is called the “Land Sector” and it is conceivable that if BSMA immerses itself in this sector then it will establish its mettle within the business community in Botswana.
- (vi) ***Utilities Corporations***: There are three main utility corporations in Botswana responsible for water, telecommunications and power. These corporations are among the top consumers of geomatics goods and services and employ geomatics professionals of their own. In our study we have discovered that they do not always get their requisite quality in their spatial data. Collaboration is considered inevitable with these corporations.

3.5.4 Communication Gap

There is a need for a diverse means of communicating all the wonderful ideas that the association has come up with. Without proper communication channels, everything that the committee is proposing will probably not materialize. The association should be very bold, distinctive and precise when communicating its vision and activities. The following are the suggested means of communication that have been preferred by the association;

- (i) **Geomatics Week**: A week before the Annual General Meetings (AGM) should be set aside as the Botswana Geomatics Week. Annual themes should always be developed to be in line with the AGM theme. Interviews should be arranged with media houses so as to communicate BSMA efforts and relevance to the society. Radio and Television breakfast shows should be exploited to market the association during the week.
- (ii) **Website**: Like any institution that desires to stay relevant in the modern day where technology is the pinnacle of communication, BSMA has to adopt new methods of communication. The association have created Website and launched it in 2014. In its construction a Dynamic Website was preferred over a Static Website. This website should provide easy emailing options, downloadable documents including but not limited to the land statutes. It has been envisioned that collaborative efforts have to be made with government and other organization for tender documents for geomatics to be placed on the website to be accessed by members of the association. The website is <http://www.bsma.co.bw/> and it is intended allow members exclusive access to important information in most sectors of the economy nationally and globally.
- (iii) **Corporate office**: To avoid fading out like in the past, BSMA Executive Committee has decided on appointing a full time office secretary, solicitors and accountants. A secretary has been identified and appointed for running the office on a daily basis. The duties of the secretary include organizing the events and activities of the association in line with

Learning from the Challenges of the Past and Readyng a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)

Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

requirements of the Executive Committee. The Executive Committee with the blessing of the general membership has also appointed lawyers to deal with substantial matters pertaining to law. The executive is still in the process of identifying and appointing an accounting firm which will look at BSMA financial interests.

- (iv) **Career fairs and trade fairs:** BSMA should sell itself to people through fairs. Set up stalls and representing all surveying institutions under one roof as a cost effective of public awareness and education. All companies owned by members will be marketed exclusively in this manner.
- (v) **Branding:** For all official BSMA activities branding is now taking centre stage in planning. The following have been introduced: Pull up banners, branded conference bags, branded pens, USB's, branded T-shirts and many others are being looked into.
- (vi) **Advertising:** A win-win strategy has been employed here. What has been recommended is that members should give BSMA mileage by using its logo as much as they could in their communications which also show case that they are members of a professional outfit. This together with branding and the website should be able to address the challenge of BSMA visibility within manageable resource expenditure.

4.0 CONCLUSION

Regarding the challenges of BSMA, the paper concludes that these are not only peculiar to Botswana as a research by Lenton (2012) across 44 professional bodies in the UK revealed the following; membership, profile, relevance, commercial, constitutional, economic, resource and international challenges. In countries like the UK one expect that associations are well established and more secure, but then the picture arising from Lenton's work suggest they have serious challenges in a number of areas. This means that BSMA challenges can be relooked at and with a proper strategic framework the situation can be improved; it does not require statutes only but also positive and committed minds from the geomatics professionals in Botswana. The current committee has therefore resolved to work hard on establishing the road map, appropriate regulatory framework and creating a positive paradigm shift. Professions that have regulatory frameworks defining their corporate rule have performed better than those who have over-looked or ignored such a philosophy. In Botswana there are a number of professions which have established regulatory frameworks such as is the case with law, real estate, engineering, nursing etc. Geomatics in Botswana as mentioned need to have a regulatory framework just like the other professions which are premised primarily on addressing public good and confidence alongside competency in professional practice. This is particularly true for professionals who are plying their trades in administering and managing a nation's fundamental assets, land.

REFERENCES

- Botswana Government Printer (Undated). The Land Survey Act.
- Botswana Surveying and Mapping Association Constitution (2001).
- Coetzee S., Rautenbach V. and du Plessis H. (2014). A qualitative comparison of South Africa's geomatics professional body's academic model against industry's understanding of SDI knowledge and skills requirements. *Journal of Geography in Higher Education*, DOI: [10.1080/03098265.2014.963794](https://doi.org/10.1080/03098265.2014.963794). Accessed 24/02/2015
- Eckberg D. L., Lester Hill L. Jr. (1979). The Paradigm Concept and Sociology: A Critical Review. *American Sociological Review* 1979, Vol. 44, p925-937. From URL: <http://www.jstor.org/stable/2094717> Accessed: 27/02/2015.
- Hannah J., Kavanagh J., Mahoney R. and Plimmer F. (2008). Surveying: A profession Facing Global Crisis. European Congress of Surveyors. From URL www.clge.eu/documents/events/2/18_s_4_en.pdf
- Khan S. (2013). Transforming Associations to Meet 21st-Century Challenges
From URL <http://www.innovationexcellence.com/blog/2013/09/05/transforming-associations-to-meet-21st-century-challenges/> accessed 02/02/2014
- Lenton C. (2012). Challenges and opportunities of the next decade: Professional Bodies Report. The Chartered Institute of Marketing. From URL www.wildsearch.org/files/Chris%20Lenton_Report.pdf accessed 02/02/2014
- Mosaik Strategies (2008). Nonprofit/Corporate Collaborations: Corporate Relations Definitions. From URL www.fundraising123.org/files/Definitions.pdf. Accessed 24/02/2015
- Tembo E. and Nkwae B. Sustaining the Geomatics Profession through effective professional associations. International Federation of Surveyors (FIG) Working Week 2012. From URL www.fig.net/pub/fig2012/papers/.../TS08E_tembo_nkwae_5683.pdf accessed 17/02/2015.
- Spreitzer G. M. and Sonenshein S. (2004). Towards the Construct Definition of Positive Deviance. *American Behavioral Scientist*, Vol. 47 No. 6, pp828-847.
DOI:10.1177/0002764203260212, Sage Publications.
- The UK Inter-Professional Group (2002). Professional Regulation, A position statement by the UK professional group. From URL www.ukipg.org.uk/publications/Prof_Reg_Booklet.pdf accessed 20/02/2015
- The UK National Consumer Council (2000). Models of Self-Regulation, an Overview of Models in Business and Professions. From URL www.talkingcure.co.uk/articles/ncc_models_self_regulation.pdf accessed 20/02/2015

Learning from the Challenges of the Past and Readyng a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)

Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

FIG Working Week 2015

From the Wisdom of the Ages to the Challenges of the Modern World

Sofia, Bulgaria, 17-21 May 2015

13/14

BIOGRAPHICAL NOTES

¹**Lopang MAPHALE** is Lecturer in Geomatics at the University of Botswana. He holds a Masters of Geographical Information Systems from University of Leeds in the UK, a Masters of Business Administration (MBA) from the University of Botswana and B.Sc (Hons) in Surveying and Mapping Sciences from the University of East London in the UK. Lopang is also a Registered Land Surveyor and has practiced vastly as a professional Land Surveyor in Botswana since 1994 and has sat on many committees gearing towards sustainable Land management, for instance the Land Administration Procedures, Capacity and Systems (LAPCAS) project. He is currently the Chairman of Botswana Surveying and Mapping Association, Botswana representative to International Federation of Surveyors (FIG) and Land Sector member at Botswana Confederation of Commerce, Industry and Manpower (BOCCIM). Lopang also sits in the Botswana Bureau of Standards Technical Committee on Geographical Information and Geomatics. His research interests include spatial data infrastructures and GIS project management, spatial data value engineering, and the use of appropriate information technologies for facilitating land delivery and business operations. His previous research has focused on sustainable rural land development and land inventories, spatial data infrastructures, GIS in transportation and professional land survey practice.

²**Jakoba KGOPOLELO** is a graduate of Ryerson University in Toronto, Canada in 2009. He has a degree in Civil Engineering, with a major in Geomatics. He started working in June 2009 within Botswana government, Ministry of Lands and Housing. Mr. Kgopolelo in 2014 join private practice and is now a Senior Survey Engineer for a private firm called TBM Surveying Services Limited.

³**Wilson MHURI** is the Chief Executive Officer of Digital Group Holdings (Pty) Ltd which is a holding company of Digital Surveys (Pty) Ltd and Wilson Connections Inc. Digital Group Holdings offers services in Land Surveying, Planning and Property Development. He holds a BSc(hons) in Surveying from the University of Zimbabwe. Wilson is a Registered Land Surveyor with more than 10 years of practice in Botswana and a Member of the Botswana Surveying and Mapping Association and is the Current National Treasurer. He is also a Professional member of the Survey Institute of Zimbabwe.

⁴**Olebogeng MOLEFHI** is Senior Land Surveyor in Botswana Government. He graduated from the University East London in 2005 with BSc(hons) Civil Engineering Surveying. He has largely plied his trade in the area of cadastral and engineering surveying together with GIS. He is a registered land surveyor and an approving officer for cadastral surveys.

CONTACTS

Mr Lopang Maphale

University of Botswana (UB) and Botswana Surveying and Mapping Association (BSMA)
P/Bag 0061, Gaborone, BOTSWANA

Contacts: Tel. +267-355425 Fax + 267-3952309 Cell. +2677213500
[Email:maphalel@mopipi.ub.bw](mailto:maphalel@mopipi.ub.bw), UB Web site: www.ub.bw, BSMA Website: www.bsma.co.bw

Learning from the Challenges of the Past and Readyng a Professional Association for the Future: The Case of Botswana Surveying and Mapping Association (7718)

Lopang Maphale, Jakoba Kgopolelo, Wilson Mhuri and Olebogeng Molefhi (Botswana)

FIG Working Week 2015

From the Wisdom of the Ages to the Challenges of the Modern World

Sofia, Bulgaria, 17-21 May 2015

14/14