DEVELOPMENT AND EVALUATION OF AN EVENT MANAGEMENT SYSTEM

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Abstract - The traditional information methods work by voice of mouth and posting billboards for advertisement of events and waiting for people to pass by the place where the billboards are posted. Also, event organizers spend most of their time driving around the community promoting their events due to lack of implementation of technologies. This might be very stressful at the best of the time, and worse when it is raining billboards get wet and people hardly walk around in that weather. Also, competitors can remove one's billboards before reaching the community. This has an impact on the health of event managers and on their finances too. Therefore, the development of an online event management system could help event organizers to advertise the events anytime anywhere they are.it will also help community to get to know what is happening around the community and show support by attending the event.

Keywords - Event management systems, Digital billboards adverts, Community Systems.

I. INTRODUCTION

In managing events, organizers do not have the ability or the time to drive around Mopane district checking if the billboards are still in good space. Competitors can easily remove the billboards. Printing out the billboards is quite expensive as well as travelling around to trace whether you are reaching out to community or not. Thus event managers might end up not making profit out of the events. Sometimes the information on the billboards is outdated. Towards solving the above problem, we propose the design of a user friendly system that will reach out to the community of Mopane district and the event organizers. The system should be accessible anywhere and everywhere and at any time of the day.

1.1. Background of the Research Problem

Event organizers spend most of their time driving around the community promoting their events.This might be very stressful at the best of the time, worse when it is raining billboards get wet and people hardly walk around in that weather and competitors can remove one's billboards before reaching into the community. This does not only have an impact on their health but on their finances too.

1.2. The Purpose and the Research Questions

The study aims to develop a system or mobile application that will help event organizers to advertise their events online.

The system will communicate with the database to retrieve all the events that are taking place at Mopani district. The system will have user interface where it will interact with the even organizers as well as the community. According to Getz & Page (2016)''Event: an organized occasion such as a meeting, convention, exhibition, special event, gala dinner, etc. An event is often composed of several different yet related functions'' (Bowdin 2006, 14.). The location for the events is usually restricted to a particular area. The application will use International Organization Standardization ISO 6709:2008 to ensure that the system follows the criteria for GPS Location correctly as to indicate where the event is happening at that particular time. ISO 6709:2008 is applicable to the interchange of coordinates describing geographic point location(Kresse, Danko & Fadaie, 2011).

The sub research questions are:What are the challenges faced by event organizers when advertising their events? What system are available to advertise events? How to design and implement the proposed system? How to evaluate the system?

This study will reduce problems that community encounter when the event are being advertised on billboard that cause land pollution. Secondly, generating knowledge of online event management system may create helpful skills to facilitate the improvement of the community. Finally, the study is expected to produce a web application system, which will allow event organizers to advertise their events to the community. The outline of the write-up is as follow: Section 1 covers the problem statement, and research objective, significance of the study. Section 2 presents the literature review and Section 3 discusses the methodological design strategies underpinning this research study including strategies, instruments, and data collection and analysis methods for the study. Section 4 presents the system implementation results while section 5 presents the evaluation of the system. Section 6 summarizes the contributions of the study with recommendations and limitations.

II. LITERATURE REVIEW

2.1. Previous Interfaces

Interface For Sharing Posts About A Live Online Event Among Users of a Social Networking

System.(Whitnah, Deng, Steinberg & Abraham, 2015). The interface allows a user to provide posts about the event via the interface, where the posts are displayed in the interface and in a social networking interface on Social networking system in connection with the user and other users associated with that user.

The user can view, via the Interface on the external system, posts from all users that are provided via the interface (e.g., everyone watching the event), thereby increasing the likelihood that the posts are relevant to the event.

2.2. Broadcast Systems

User Following Event Being Broadcasted Live.(Whitnah et al., 2015). Technology today allows many events to be captured and viewed on television, the Internet, etc. These broadcast accounts of events (e.g. via video, audio, text description, etc.) can be followed by users on television, websites, mobile devices, and so forth. A user can easily follow the broadcast of an event of interest while the event is actually happening or being broadcast. However, to share this event with other users of a Social networking system, the user has to do so separately from following the event itself.

2.3. Online Event Tracking Systems

Systems by (Srivastava, Shepard & Kubala, 2004)notifies a user of the detection of data that is relevant to an event of interest.

The system obtains a user profile that includes one or more example documents that define the event. The system receives data that corresponds to multimedia information and determines the relevance of the data to the event. The system then notifies the user.

2.4. Providing Personalized Online Services

System for providing personalized online services and advertisements in public spaces.(Mathai & Margon, 2005).The present invention is directed to methods and systems for providing personalized and integrated online services for communications and commercial transactions both in private and public spaces. This also provides advertisers the opportunity to directly engage actual and potential users with selected advertising or marketing content based on each user's profile and usage history.

2.5. Direct Placement of Adverts

According to Hunter (2002), Commercial advertisers, such as consumer product companies and the advertising agents that represent them, directly access a network of thousands of large, high resolution electronic displays located in high traffic areas and directly send their own advertisements electronically to the network to be displayed at locations and times selected by the advertisers.

2.6. Efficient Auctioning of Electronic Billboard

According to Kannan, Ravindran, Mani & Vallabhaneni (2008), the present disclosure is a method for determining an auction reserve price for a display time slot on a billboard. The method may comprise requesting traffic information of an area in proximity of the location of the billboard from a mobile phone service provider and determining the auction reserve price for the display time slot utilizing a pricing model based on the traffic information.

III. RESEARCH METHODOLOGY

3.1. Research Strategy and Approach

We use quantitative overall research strategy to gather data that is revised and tabulated in numbers, which allows the data to be characterised by the use of statistical analysis (Hittleman and Simon, 1997, p. 31; Hudson & Ginns, 2007). Thus,Positivist research is used as a research approach because it is more objective, and may be generalised (Bhattacherjee, 2012; March et al., 1995:251; Myers, 2009:284). So the interpretive research is not used because it is subjective. Interpretive researchers are not neutral in the research process and researchers are expected to acknowledge their involvement and influence(Adebesin et al., 2011:310; Bhattacherjee, 2012; Hevner et al., 2010:320; Myers, 2009:284).

3.2. Prototyping

The use of prototyping has been developed to the level of being the basis for software development methodologies, such as the Evolutionary Prototyping lifecycle model Sommerville states that the evolutionary prototyping methodology "is now the normal technique used for web-site development and ecommerce applications (Zant, 2005) (Robert F. Zant, 2005). Development Tools. The following tools are going to be used in the development of the proposed system.

- Notepad++ This software will be used to develop static pages of the system. All the pages will be designed using this package.
- JavaScript This language will be used to write scripts throughout the development process. It will also be used to create active pages.
- MySQL Server Database Package This package will be used to develop the actual database where the data will be stored. The database comprise of quite a number of tables different entities the system will cater for
- Php This language will be used as a sever script language on the proposed system.
  WordPress this platform will be used to develop dynamic paged of the system.The system will be composed of the following main modules
- Registration – Participants can register online for any event.
- Event – Event manager can generate event by this module. They can edit, delete the

information of any generated event. iii. Certificate

- The system can generate certificated automatically and system can mail it to particular participant.
- Notification – Participants can get notification about event timing, place or any updates.
- User Module – User can register for event. Can easily check event details times and can contact event manager easily.
- Event organizer Module – Volunteer can view the details of his/her event participants. Volunteer has to update the winner of his/her event in the system.

Admin Module – DBA has all the rights. He can add, edit, and delete any information in the system. He can add new event, event manager, Volunteer as well as update them.

The application will use PHP, CSS3, HTML5, JavaScript and MySQL for database.

a. PHP server scripting language that we will use to communicate with the database
b. HTML5 would be used for structuring the system.
c. CSS3 will be used for styling the structured system.
d. MYSQL will be used for storing data.
e.

3.3. Survey

Survey is the method for the evaluation of the online event management system. Details are as follows:

The ideal population for this study would consist all the community menbers of mopane distric. According to Huysamen (1994:38), the populations of interest to social and behavioural scientists are so large that from a practical point of view it is simply impossible to conduct research on all of them. So the sampling techniques follows. Mason (2001:83) refers to the principles and procedures used to identify, choose and gain access to relevant units which will be used for data generation by any method. The basic principle of sampling is that it is possible to produce accurate findings without the need to collect data from each and every member of a survey 'population' (Donohoe, 2011). Simple random sampling will be used, which gave each member of the population the same chance of being included in the sample and each sample of a particular size the same probability of being the sample chosen (Huysamen, 1994:39). A stratified random sample also ensures representativeness, irrespective of sample size, because it has been built into the sampling strategy right from the very beginning. This researcher concluded that the simple random sampling method was the most suitable for this research because at each draw each investigator had the same probability of being included in the sample. Interviews will be used for the event organizers and the villagers, and because we will retrieve firsthand information using this method of collecting data, interviews will be our primary investigation.

In this research paper, data will be collected from Administratorsand Event organizers. All quantitative studies rely on statistical analyses because quantitative research is a method of approaching questions that is based on objectives data. Quantitative measures aim is to explain connecting relationships though most often, in Information Technology research, these methods can only determine relationships between the different factors studied. (Creswell, 2003).

IV. SYSTEM DEVELOPMENT RESULTS

4.1. Results screenshots

The demo application has been deployed and can be accessed with the following address http://nyikozodwa.co.za/onlineevent/ .

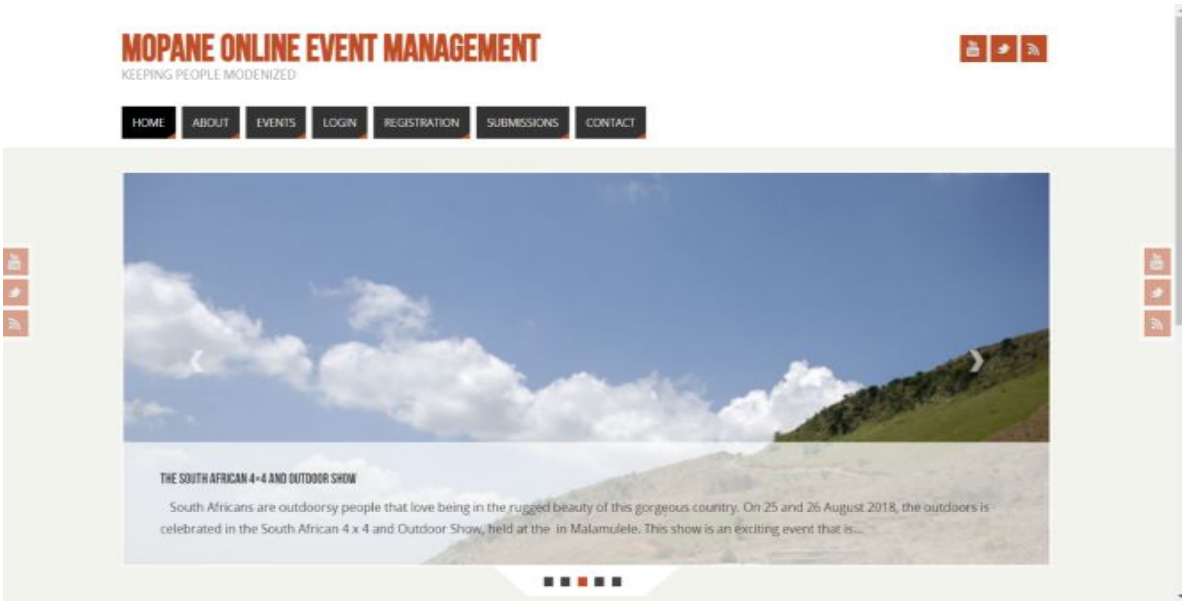


Figure 1: landing page for every user

The landing page allow administrator to register their profile in order to login to the system. You can use the sign in screen to login and access the dashboard which contains most of the links to access frequently used functions. Some of the functionalities that the administrator can perform on the dashboard are as follows: add events, update events, delete events, approve post and update personal details. A comment and enquiry page is added for everyone to ask question regarding the system online for quick respondent.All the messages will be stored in the database and viewed on dashboard. This is the landing page for all users, whereby all users can view the upcoming events before logging in the system.

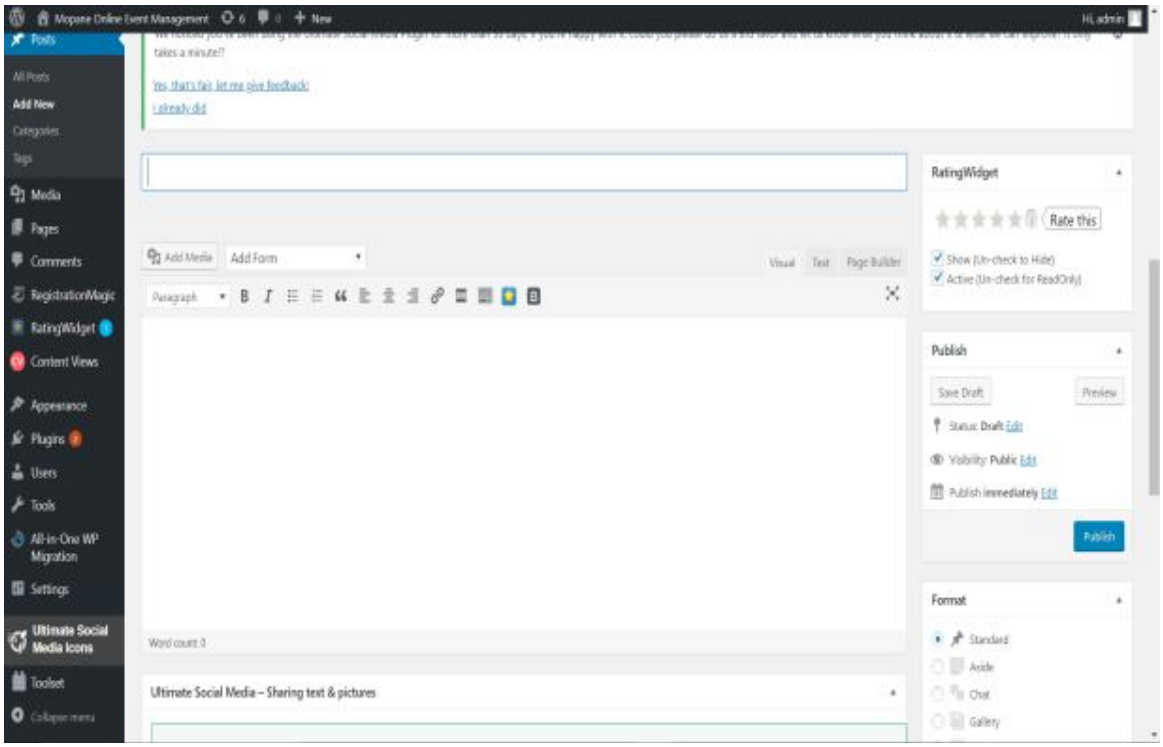


Figure 2 : add events

Description: The Admin can add manager, main event, and sub-event also. Input: main event, sub-event, manager. Output: Add successfully in database. Processing: Admin is able to add events, edit and delete event. On figure 2 is the page where the admin is adding the event, Admin can add pictures as well as video that compliment the event.

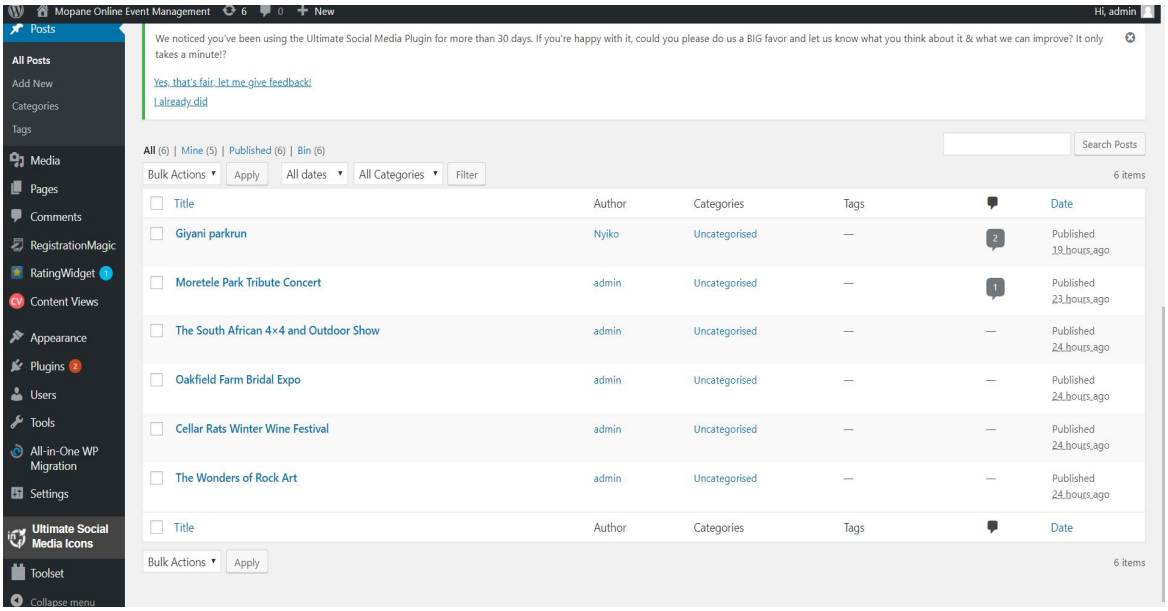


Figure 3: view all events

In this page an admin is able to view all the event, even the ones the he/she didn't add.

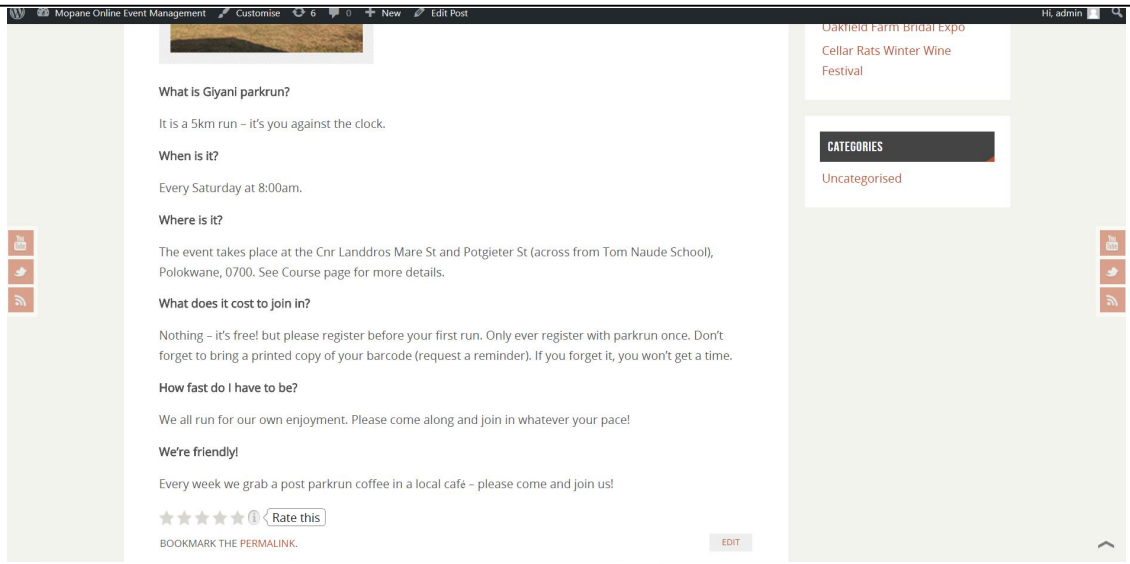


Figure 4 : admin edit event

In figure 3 we are showing how can an admin view one event and be able to edit it.

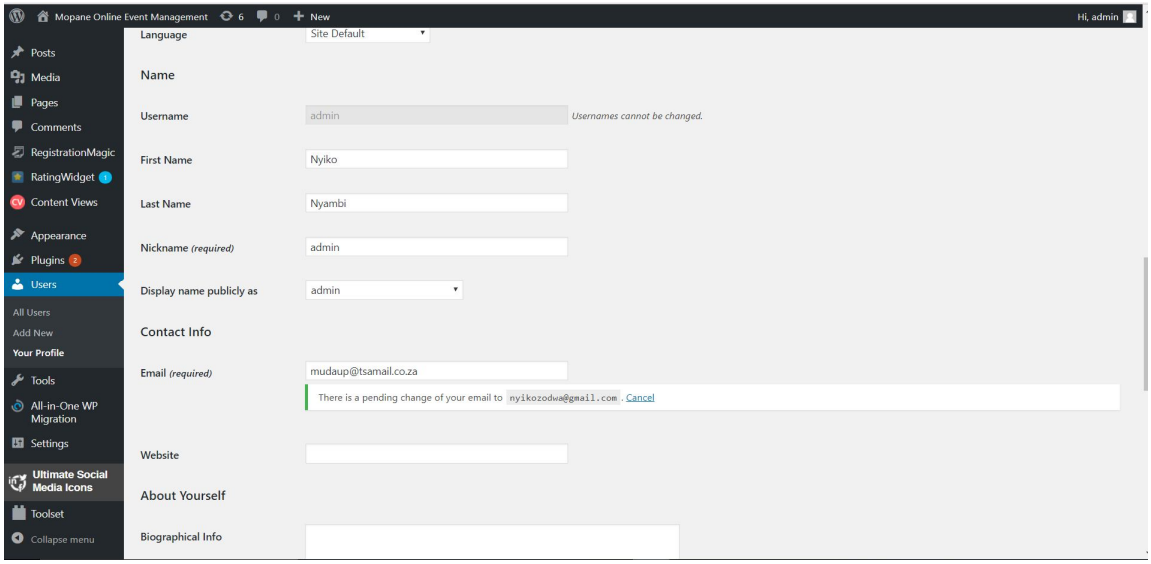


Figure 5 : adim edit profile

The admin also have right to view their own profile and be able to edit it.

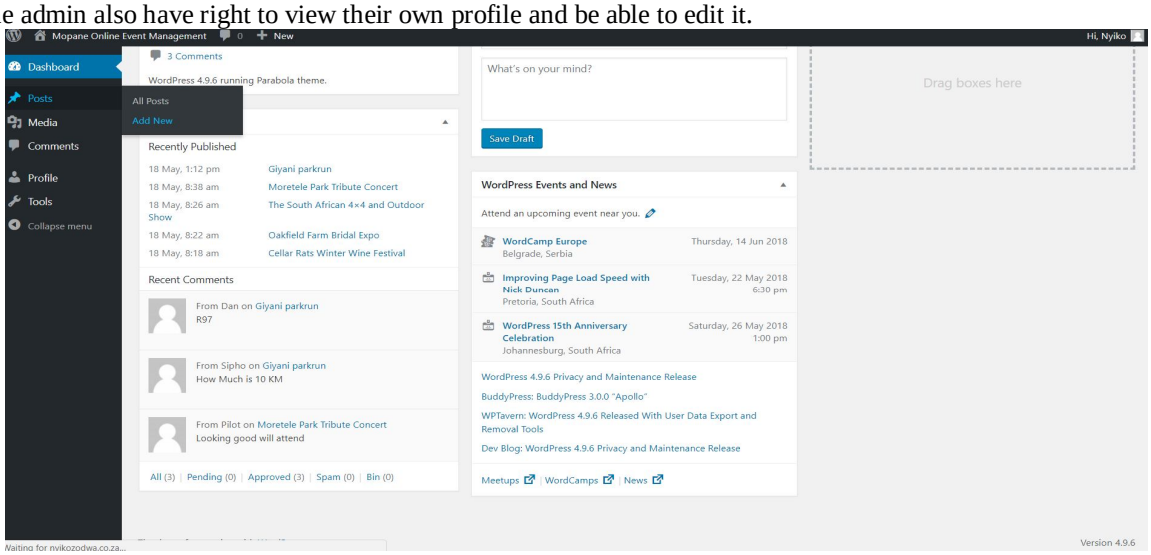


Figure 6 : lading page for event organizer

An ommitted figure enables viewing profile page for event organizers.

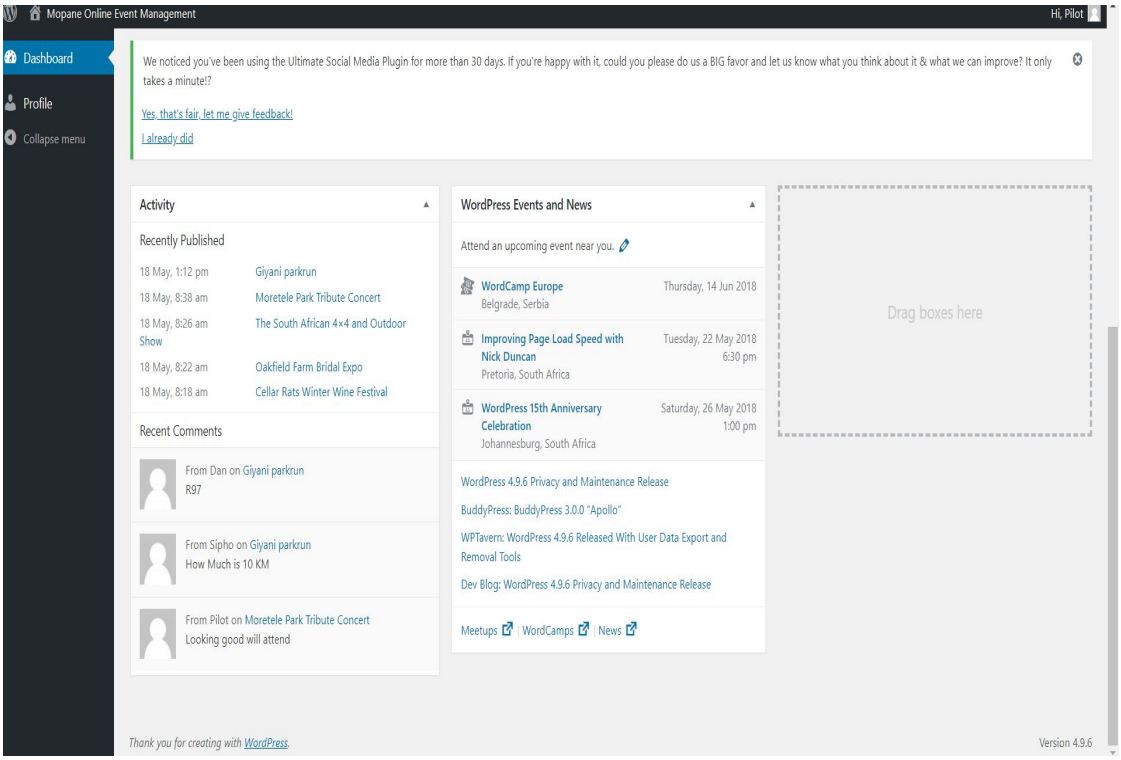


Figure 7 : lading page for users

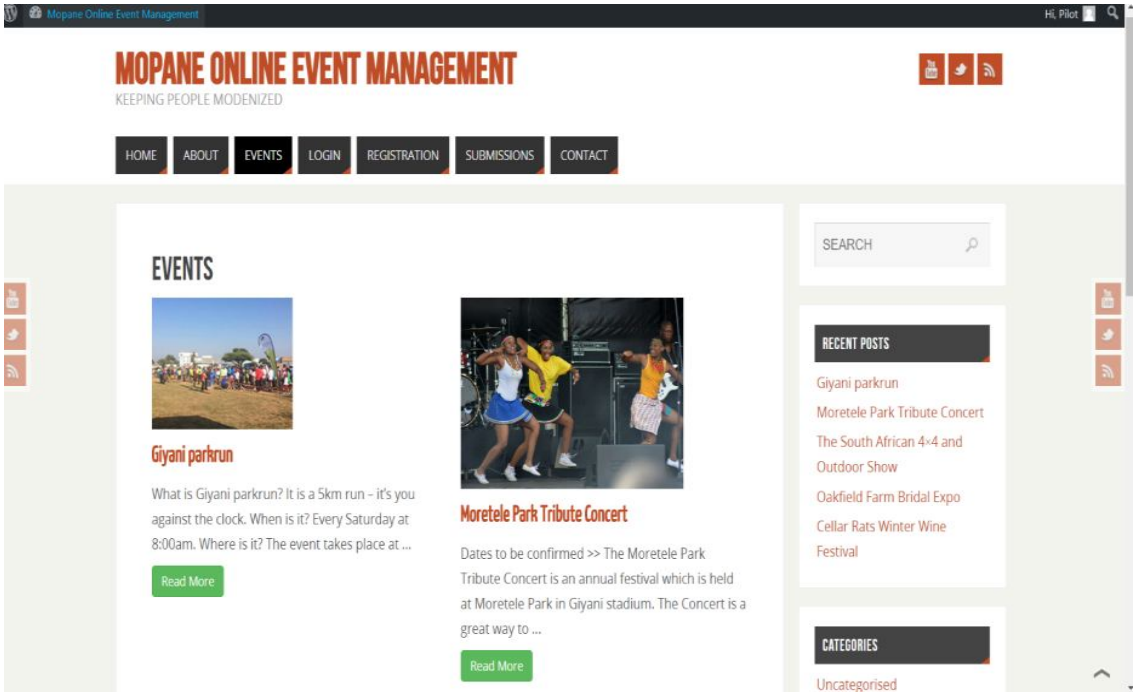


Figure 8 : view all events

V. SYSTEM EVALUATION RESULTS

The interview questionson the evaluation is divided into two sections the first section presented the introduction and a short description with screenshots of the proposed prototype to familiarize the respondents with the main objective of the prototype and its functionality.

The second section presented general questions that aimed to understand the challenges of onile event systems.

The participants of the interview were 15 community memebrs and 10 management.Out of 25 participants 23 paticipants understand the need of having the application and 3 did not agree.The numbers of participants along with their reasons are as follows:

Results of the participants

Item	Agree	Disagree
I am satisfied with the system	17	3
easy to use	15	5
meet your expectations	18	2
Important part of my technology skills	13	7
I am happy to with the system	18	2
I know what is happening in the community	14	6
I am capable to use variety of technology	12	8
I prefer traditional ways	17	3

Regarding the usefulness of the online event management system in Mopane community, Community find it useful being able to access the system and know what's happening around the community while they are indoors and indicated that it allows them to attend events in high numbers comparing with the traditional way of advertising .

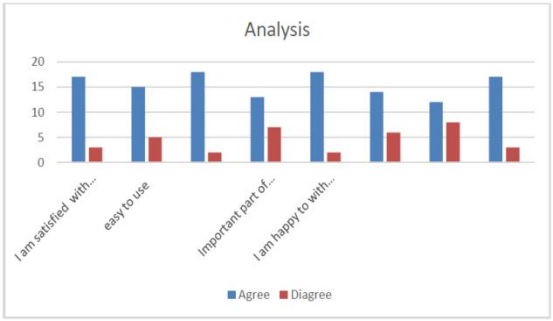


Figure 9:Participants Results

CONCLUSIONS

Recommended is the use of a Graphical User Interface is recommended because it is relatively easy to use due to its use of the mouse. Again certain measures level need to be taken to ensure the accessibility regular maintainance and upgrades.Sometimes users and system interface also call for the ability of the system and its administrators to handle a quick outflow of connections and requests. Further studies will be based on understanding how the various components of this system can improve the user experience and back up recovery in case of failure.In the process of evaluation the application will be published that most users prefer mobile access to the application and two survey were prepared for the participants to rate the application.

The web servers will be installed in full view of possible development and should be able to handle a quick uninterrupted system.

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