

# Implementation of E-Marketing using SPIP, MySQL Database, html, and Bootstrap Tools and their Effects in the Community

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**Abstract:** E-marketing in other words (online marketing) are internet marketing based or web based marketing, Digital Marketing that can be applicable over internet or social media, or email, or other technology that can help to announce some information related business to the customers.

SPIP is Open source application, and is one of the content management systems that used to manage several digital content or websites of e-business. It manage creation and modification of digital content. By (Goodwin & Vidgen, 2002, pp.70), the content management is a significant business issue for any organization that maintains a website that has a large number of pages or has frequently changing content provided by multiple providers. Currently, managing content is a big problem for many institution and in different business, because it need money for some consultant or asking some business to hire IT who is qualified in websites developments. Everything can be done by the bit of simple clicks, accessing the Internet [2]. SPIP is considered as both a publication system and a development tool. After viewing SPIP's features, and functionalities, we will describe how it works and explain to the users how to develop with it using some helpful examples wherever possible. This paper will introduce the usage of SPIP content management system, using MySQL database and html, finally bootstrap, and showing formula for looping articles, sections, slides of website, and updating of digital content my everyone in the business not only IT consultant. Various methodology has been used to predict SPIP usability in this digital vision.

**Key Words:** bootstrap, content management, e-marketing, Digital Marketing, internet, MySQL database

## 1. INTRODUCTION

E-marketing is the type of marketing being used to advertise goods and services to reach customers and to the different partners using websites contents. Digital marketing extends beyond online marketing including ways that will not require the usage of Internet. [2] It

provides mobile phones (both SMS and MMS), social media marketing, banner advertising, search engine optimization marketing, websites and several other types of digital media.

This paper will focus on using SPIP Languages, MySQL database, html, and bootstrap tools and their effects in the community.

As the world is constantly changing, technology is mostly advancing. There are no more unconnected parts of the world as well as there is no need to travel for months of finding customers on the site, publicizing your goods and services, meet anyone and is not very simple to enter into everyone's office for advertisements. Everything can be done by the bit of simple clicks, accessing the Internet. Of course, the Internet is a very well-known "substance" integrated into the life of modern humanity, like mushrooms forming a symbiosis with tree roots, bringing a lot of benefits to all players of this game. It is hard to say, what exactly happens there - in the universe of numerical data, but it changes the world and helps time to go faster [3].

SPIP is open source application is both a publication system and a development platform. It uses mostly French keyword. After a quick view of SPIP's features, we will describe how it works and explain how to develop with it using helpful examples wherever possible. This paper targets webmasters for knowledge of PHP, SQL, HTML, CSS and JavaScript in e-marketing.

SPIP is a free software package distributed under the GNU/GPL3 licence. Originally a Content Management System, it has gradually become a development platform making it possible to create maintainable and extensible interfaces independently of the structure of the managed data [4]. SPIP pages are stored in MySQL database. Before using spip, must be downloaded through [www.google.com](http://www.google.com).

## 2. Methodology

When establishing this paper, the amount of works has been viewed and used. In Rwanda, digital communication does not appear to have completely replaced previous offline networks, however. The action of building some links through attending international tourism trade fairs and networking are always crucial elements of tourism in Rwanda and this means that it is difficult for new firms to establish themselves.

### Mr. Ishtiaq, Ahmed, BRAC Business School

He concluded that in the digital age, to build a good relationship with customers need only one thing to do, is digital marketing. Bands are trying to listen to their customers and providing best possible service to them. The amount of people in digital media is huge. As anything positive about the branding can lead them to success.

### MR. Ben. November 2009, programming with SPIP book

He said that SPIP generates HTML pages from templates, containing a mixture of html, loops and criteria, tags and filters. Its strength is the ability to extract database content using a simple and understandable language.

### Mr. Therese Karlsson and Jennie Boije af Gennas, Goteborg, Sweden 2005

He conclude that with the customized CMS specific evaluation model that has been generated was able to point out the business effects generated to the organization. The business effects discovered are general and possible to generalize in a wider context. The compiled framework for the evaluating a CMS implementation can also be applied on intranet and extranet solution.

### Mr. Jerzy Letkowski, Wertern new England University

Concluded that Relational databases are complex data structures with solid formal background and lots of mature development and exploration tools. When dealing with just a few entities, an experienced architect, while mentally visualizing the database structure, may be able to create the database directly using SQL based table definitions. When designing a database in a team setting, especially when the members of the team have diversified backgrounds, utilizing graphical tools is imperative. Subject-matter experts, participating in the design process and having limited database expertise, generally

prefer working with graphical design tools. MySQL Workbench.

### 2.1 Description of SPIP functionality

SPIP in general uses HTML pages from different templates, that containing different functions of html, loops, criteria, tags and filters. The functionality of SPIP extract itself in MySQL database and all the content is able to be understandable. SPIP is particularly suitable for publishing portals, but it can also be used for a blog, wiki, or social network. In general SPIP application can manage any data stored by MySQL, Postgres and SQLite databases. Extensions also offer interaction with XML [4].

### 2.2 Requirement when installing SPIP

When configuring SPIP, there is no special configurations needed, especially you need a web browser. If you don't have it, you can download because is an open-source application.

The following are steps to follow:

- Download SPIP and XAMP
- Install XAMP
- Put your SPIP in C:\xampp\htdocs/ peste SPIP
- Rename SPIP file to your website name
- Install browser(Mozilla Firefox or Google chrome)
- Start apache and MySQL

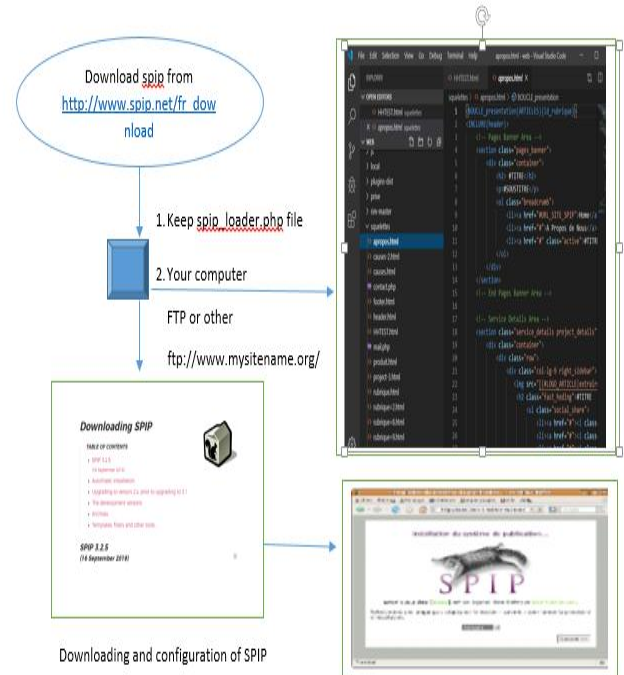


Figure 1: installation process

- Then you enter through the spip interface (localhost/website\_name/ecrire) then press Enter
- You configure your username and password, then enter into private space.



Figure 2: SPIP login Interface

### 3. Creating functions (LOOP)

**Defining a loop first:** the word loop in programming means a sequence of instructions that is continually repeated until a certain condition is achieved. Usually, some process is done and such as getting an item of data and changing it, and then some condition is checked such as whether a counter has achieved a prescribed number [8].

SPIP tool has capability of transforming templates into static pages. Many templates are composed by loops (<BOUBLE>) and the select elements. SPIP select also tags (#TAG) and the tags role is to play role of displaying the properties and all elements' values of the contents.

#### 3.1 The syntax of loops

```
<BOUCLE_name(TABLE){criteria}{criteria}> //
starting the loop
.....objects.....
</BOUCLE_name> //closing of the loop
```

Inside the loop you put elements that you what looping

Characters of loop: unique name, starting and ending of the loop.

#### 3.2 Nested loops

As definition, the nested loop in programming is generally something that is nested or fully contained within something else of the same kind [8].

Here we have two sections one in another. This will list all articles containing whole sections. <BOUCLE\_nested(RUBRIQUES){racine}{0,3}{par titre}> //the first loop with section from 0 to 3

```
<li>#TITRE
<B_bit1>
<ul>
<BOUCLE_bit2(ARTICLES){id_rubrique}{par titre}>
<li>#TITRE</li>
</BOUCLE_arts>
</ul>
</B_bit1>
</li>
</ BOUCLE_nested >
```

#### Recursive loops

A site that has many sub-sections, many forum messages, it provide the uses recursive loops. This makes it possible to display identical elements very easily [4].

```
<BOUCLEx(TABLE){id_parent}>
...
<BOUCLEn(BOUCLEx) />
...
</BOUCLEx>
```

Ben, Programming with SPIP book, May (2010), noted that in programming, an algorithm (a data-processing code) which calls itself described as being "recursive". In this section a recursive loop (xy), contained in a parent loop (ny), makes it possible to execute the loop (ny) again, by automatically transmitting the required arguments. Therefore, inside the loop (ny), the same

Loop (ny) is called with different parameters. This is what we call recursion. That process will be repeated till as the recursive loop returns results.

### 3.3 Using MySQL database in SPIP content

First of all, you create a new database, in config file to the SPIP, you describe database name, user and password.

In the database screenshot bellow is the view of SPIP file

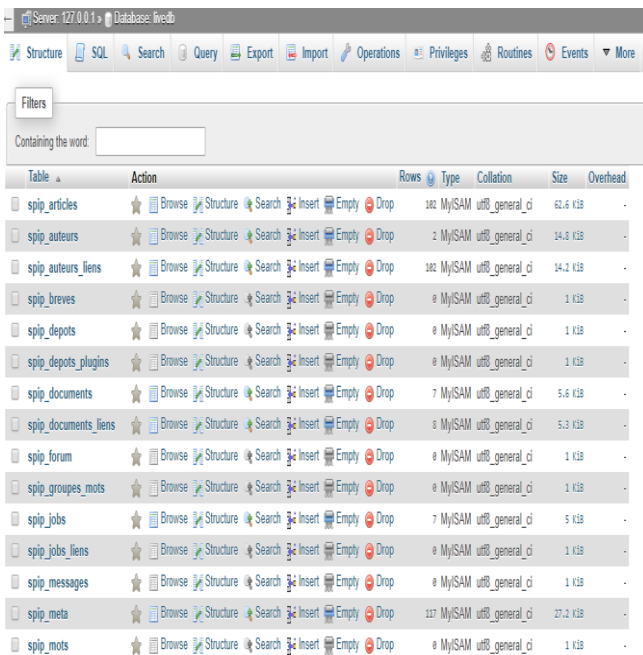


Table	Action	Rows	Type	Collation	Size	Overhead
spip_articles	Browse Structure Search Insert Empty Drop	182	MyISAM	utf8_general_ci	62.6 KiB	-
spip_auteurs	Browse Structure Search Insert Empty Drop	2	MyISAM	utf8_general_ci	14.6 KiB	-
spip_auteurs_liens	Browse Structure Search Insert Empty Drop	182	MyISAM	utf8_general_ci	14.2 KiB	-
spip_brevets	Browse Structure Search Insert Empty Drop	8	MyISAM	utf8_general_ci	1 KiB	-
spip_depots	Browse Structure Search Insert Empty Drop	8	MyISAM	utf8_general_ci	1 KiB	-
spip_depots_plugins	Browse Structure Search Insert Empty Drop	8	MyISAM	utf8_general_ci	1 KiB	-
spip_documents	Browse Structure Search Insert Empty Drop	7	MyISAM	utf8_general_ci	5.6 KiB	-
spip_documents_liens	Browse Structure Search Insert Empty Drop	8	MyISAM	utf8_general_ci	5.3 KiB	-
spip_forum	Browse Structure Search Insert Empty Drop	8	MyISAM	utf8_general_ci	1 KiB	-
spip_groupes_mots	Browse Structure Search Insert Empty Drop	8	MyISAM	utf8_general_ci	1 KiB	-
spip_jobs	Browse Structure Search Insert Empty Drop	7	MyISAM	utf8_general_ci	5 KiB	-
spip_jobs_liens	Browse Structure Search Insert Empty Drop	8	MyISAM	utf8_general_ci	1 KiB	-
spip_messages	Browse Structure Search Insert Empty Drop	8	MyISAM	utf8_general_ci	1 KiB	-
spip_meta	Browse Structure Search Insert Empty Drop	117	MyISAM	utf8_general_ci	27.2 KiB	-
spip_mots	Browse Structure Search Insert Empty Drop	8	MyISAM	utf8_general_ci	1 KiB	-

Figure 3: MySQL view of SPIP content

### 1. Linkage between html and SPIP

In SPIP, you can use templates of website that contain html tags. Below is my intervention related to the site web designed using SPIP.

```

1 <BOUCLE_presentation(ARTICLES){id_article=1}>
2 <INCLUDE(header)>
3 <!-- Pages Banner Area -->
4 <section class="pages_banner">...
14 </section>
15 <!-- End Pages Banner Area -->
16
17 <!-- Service Details Area -->
18 <section class="service_details project_details">
19 <div class="container">
20 <div class="row">
21 <div class="col-lg-9 right_sidebar">
22 
23 <h2 class="fast_heding">#TITRE
24 <ul class="social_share"> ...
30 </ul>
31 </h2>
32 <p>#TEXTE</p>
33
34
35
36 </div>
37
38 <div class="col-lg-3 left_sidebar order-lg-first">...
77 </div>
78 </div>
79 </div>
80 </section>
81 <!-- End Service Details Area -->
82 <INCLUDE(footer)>
83 </BOUCLE_presentation>

```

```



```

This is how you can use picture or other kind of Image SPIP.

```

</a>
<div class="doner_name">
<a href="[(#LOGO_ARTICLE|extraire_attribut{src})]">#TITRE</a>
<h6>#TEXTE</h6>

```

### Using the hyperlink in SPIP

### The role of bootstrap in this SPIP application

What is bootstrap?

Definition from Wikipedia, **Bootstrap** is a free and open-source CSS framework directed at responsive, mobile-first front-end web development.

In today's world, many users and visitors of the websites uses their smart phones and iPad for viewing the web contents. Bootstrap tags help the devices to take all forms of application opened. In this paper, we never showing all the contents of how using bootstrap, but we state example of bootstrap page and coding. It's good when we use it because it make visitors flexible.

Figure 4: Bootstrap example



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What is a loop and how is it work in spip

Loop is a sequence of instructions that is continually repeated until a certain condition is reached

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Figure 5: View of private space

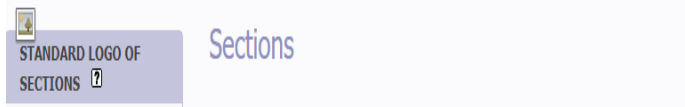


Figure 6: Output from the SPIP templates.



When reached to the final, the SPIP application give two options.

Private Space is where you can use to update content. Then recalculation is updating through browser. Refreshing pages after update.

### Conclusions

Digital content management system provide a big important role in management of web based application, and community need to interact with it for making simple the management, editing and creation of the content of the website. This usage can reduce cost and help in time management.

Several digital content management system are used as wordpress, Dropal, Joomla, Magento, ... but the fully implantation of SPIP can make ease the management of digital content mostly for the user of French international language.

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