Commercial database application report

Business, Company



Abstract

Proper marketing is key to gain competitive advantage for a company.

Management must put some efforts in maximizing available communication medium especially between and organization and its clients. Businesses especially should utilize the new technological schemes available since the world is gearing towards numerous technological advancements affecting the paradigm of conducting businesses. This paper proposes to create a Camping Site directory for the company as a one way of marketing the companies camping equipment products as well as gain alliances with partner companies. This paper also presents ways which the website could add to the profits of the company.

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Introduction

The world is currently living in an era where the lives of humans are touched

by various innovative ways of living brought about by technology.

Technology has unlocked new possibilities which were far beyond

imagination decades ago. One cannot deny the fact that in every corner of

the world, technology is present, opening new opportunities to different

walks of life. Among all the technologies, the World Wide Web (WWW) has

the greatest impact to humankind. Business, communication and

instructional paradigms shifted to new paradigms involving the utilization of

new technologies specially involving the use of the internet. It has become a

necessity for business firms, academes and institutions to advanced or keep-

up with the trend of conducting their respective business processes or they

will be left behind. The adoption of new technologies emerged with great

power. Workers can now do their office tasks at home because through

technology, the work load is delivered right to their homes. Through modern

technology integrated with the interconnected global networks, doors that

lead to vast possibilities, innovations, and opportunities are opened.

In the world of leisure seekers or campers, the internet has been of great

help to them as information regarding camping sites, activities that can be

done in each sites, contact information and other relevant information are

readily available to them, reducing effort and saving time. With just a click, they are able to know what to expect to a site, or contact them with regards to its availability. Likewise, with readily available information on the web, campers are given a wide variety of choices as from the information available on the internet alone, they are able to scrutinize and look for camping sites that suits best their needs. This has been a trend as costumers are gearing towards the ease of conducting businesses online.

As a camping equipment vendor, it is necessary for us to keep relations with different camping sites within our jurisdiction. By creating and maintaining a website where a list, descriptions, contact information and possible activities within the camping site will be viewed, there is a possibility of increasing our market. Interested campers will naturally need equipments for the different activities they will be doing in these sites thus the website will also be utilized for advertisement of the different services the company is offering. The website will be earning its own keep by engaging into numerous revenue streams. Particularly, the website will engage in banner advertising, affiliate advertising, Google Adsense or any similar scheme for earning money from the website's content. Likewise, campsite listing will be for a fee to be paid by the owner of the campsite. In addition, we will also seek advertisement for products and services of other related companies and the campsites itself while also providing add space for our own camping equipment.

For a start, the company will focus on campsites within France but would later on expand to other campsites in the United Kingdom that are within driving distance from our camping equipment stores.

This new business model will be beneficial to the company in such a way that

this will give the company a new method and one with the widest coverage form of advertisement since there is no limit to the "reach" of the website. In addition to the provision of additional advertisement scheme where the company can also advertise promos available, it is also a method of gaining additional income for the company through the numerous revenue streams. This will also serve as a way to strengthen the company's relations with other partner business so the company might also get free advertisements or referrals from them. Aside from the tangible benefits the company may gain from the website, this website will also serve as an avenue for interactive information interchange, where the company can establish an online community that where information gained will later on be utilized by the company to either improve its services or for decision making purposes like the those involving changes in products or getting additional products. This would also enhance the image of the company as this will imply that the company is working towards modernization and would give the impression that what the company sells are also among the latest technology. In addition to these, this will also serve as a good form of feedback mechanism for the company.

The campsite listing works by letting each campsite owner create its account where they will fill out the duration of the listing of their campsite as well as filling out a form regarding the details of the campsite. The corresponding fee for the listing will also be determined.

Functional Requirements

Allowing the viewers or users to search through the lists of campsites and viewing of related information will be the primary function of the website.

The capability of the website to add, delete or update the records in the database is a secondary function. It is important for the database to come up with these functions as this will address the future growth needs of the site as some campsites may be removed because these are not being maintained anymore, and the information provided on each campsite might change from time to time especially if there are new features to these campsites. Other functions of the website to improve its usability and utility include the following:

- Provide an automatic e-mail notification to the registered account when a new campsite posted has been added to the listing
- Provide monitoring mechanisms on the use of the system
- Provide a mechanism to automatically inform the owners (registered account) of a campsite at least 10 days before the expiration of its campsite listing
- Provide automatic non-listing of campsites with expired listing fee
- Provide a mechanism to search by campsite name, location or by activities
- Provide a contact information or feedback mechanism for customers and for inquiries on advertisements

Front End Design

The front-end design of the website will be created such that the page layout is simple but functional. Color and graphics will be used such that it will reflect the purpose of the website. Minimal multimedia will be used for fast loading. With regards to its content presentation, common fonts such as Arial will be used consistently. To avoid monotony for the website appropriate techniques for writing for the web like the use of heading, bullets and white

spaces will be applied as well as ensuring that the content is organized in a consistent way. Likewise, to ensure functionality, all internal and external links and forms should be functional as expected.

Since the website is expected to pay for its own, 1/3 of the design would be used for banner and small advertisements and write-ups for possible Google Adsense.

A sample front-end design is found in Appendix A.

Database Design

Relational Database Management System (RDBMS) using the MySQL database will be used as the backend database. One database will be used with the following tables and relations.

Users Table

The users table contains information about the registered users. There will be two types of users categorized according to clients on those involved in administration of the website. Both will be able to access specific types of data only and with user restrictions like only those with administrative powers will be able to post advertisements to the website, while the registered users with valid campsite listings will be able to add to the campsite list. Unregistered users will be able to view public information.

Location Table

For ease of use, locations will be saved on a separate table to avoid duplication of data

Campsite Table

This will contain all the necessary information about a campsite Activities Table This table will be a sub -table of the campsite table where the specific activities offered by the campsite will be saved

Advertisement Table

This table contains advertisements and relevant information entered by a registered used

The detailed database design is found on Appendix B.

RDBMS & Frontend design platforms

The website to be proposed will be patronizing open-source programming and database software to minimize the cost it will take for the company to develop. Specifically, for the back-end database, MySQL will be used to hold information about the campsites. This specific software is chosen because aside from being available for free it is not only flexible and readily accessed by several programming languages but has also embedded security measures for the data it contains and reliable.

For the front-end design, HTML, CSS and PHP will be the main platforms to be used in designing the website. These are chosen because of they are free, flexible and compatible to almost all browsers while PHP has been proven to work well with MySQL.

Implementation

Basically, implementation of the project will commence with identification of the web development team consisting of the project leader, a webmaster, a quality assurance engineer, researcher/writer and a designer/developer. The webmaster and will partner with the designer/developer for the technical aspects of developing the website. Updating and quality of content of the website will be the responsibility of the quality assurance engineer and the

researcher/writer. The project leader will take the overall lead in all the implementation phases of the project.

After the team , the following activities shall be undertaken.

- Content development & analysis

This stage of the implementation will include content inventory and content analysis and development

- User experience design

This stage of the implementation will include process and task analysis, development of site map and the actual virtual design a well as the creation of page wireframes and prototypes

- Site production and Engineering

This stage involves the actual programming and connection of the website, page production and quality testing

Testing

For the software design testing, the checklist on table 1 will be used for testing.

Training

Training on how to use the website will be given to all the employees for them to have a hands-on experience of navigating the website. Likewise, the people who will be responsible in processing the fees for advertisements and inclusion in the list should also be given trainings especially on how to access to check applications and post the applications or advertisements to the website. As part of the documentation and training, a user manual will likewise be provided.

Rollout

The project is scheduled for a 100 day duration including all the required testing. Figure 1. 0 below shows a detailed gantt chart for the project set to 100 days.

Figure 1: Gantt Chart of Website Production

Maintenance and Disaster Recovery

Maintenance of the website will include the hiring of one webmaster that will be responsible in keeping the technical side of the website, a designer/writer that would be responsible for keeping the front-end and back-end of the website updated and a support staff for answering inquires and acceptance of payments for advertisements and listings. These are the basic functions since most of the other critical tasks are automated.

For disaster recovery, a backup mechanism will have to be implemented to ensure that all data will be saved in case something happens.

Conclusions

Based on the analysis conducted on the proposed additional service of the company, pursuit of the project will be of great help to the company especially on enhancing its image and expanding its market. Through the website, there is a great possibility of gaining clients as well as gaining alliances with several other companies which will later help the company gain competitive advantage.

This website will also help advertise the company while also gaining income from it through the advertisements and listings. In addition, this is a good avenue for information exchange among people with the same interest giving "information" to the company on what products they will try to venture into.

Recommendations

For the best results, it is recommended that the contents of this plan will be further reviewed before adoption especially on the database design. Further, a well tested web host like godaddy. com is recommended to be asked for the hosting services required by the website. To regular updating of the website, it is also recommended that a webmaster who will also serve as an administrator will be hired for fulltime by the company.

References:

Somerville, I (2011). Software Engineering. 9th Edition. Pearson Education.

New York.

http://www.chrisolson.com/coa/coacontent/OlsonRolloutArtMay02POST.pdf

Appendices:

Appendix A: Front End Design

Appendix B: Database Design

Appendix C: Web Design Checklist