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AUTOMATED SYSTEM FOR EFFECTIVE INTERNET MARKETING CAMPAIGN (ASEIMC)

Todorka Kovacheva

Abstract: *The purpose of the paper is to present an automated system for realization of effective internet marketing campaign (ASEIMC). The constantly growing number of websites available online brings more problems for the contemporary enterprises to reach their potential customers. Therefore the companies have to discover novel approaches to increase their online sales. The presented ASEIMC system gives such an approach and helps small and medium enterprises to compete for customers with big corporations in the Internet space.*

Keywords: *internet marketing, internet strategy, marketing strategy, search engine optimization, web promotion*

ACM Classification Keywords: *H.4.3 Communications Applications, H.3.4 Systems and Software, H.3.1 Content Analysis and Indexing*

Introduction

Internet is constantly and rapidly growing network. Everyday thousands of new websites become available online. Many businesses try to sell their products and services through Internet. The result: millions of website promoting and selling the same products and services. The competition is at high level. The companies from one business branch compete for visitors and customers online with other companies from the same business branch.

The constantly growing number of websites available online brings more problems for the contemporary enterprises to reach their potential customers. Therefore the companies have to discover novel approaches to increase their online sales.

The scope of the Internet Marketing

Internet marketing is a combination of activities directed to increasing of the rating of the site of the campaign in Internet, increasing of its traffic and as a result attracting of new clients and growing of the campaign. One of the major activity of the Internet marketing is the search engine positioning. The major practices for this goal realization are:

- Code optimization
- Content optimization
- Technical processing
- Link popularity

The Internet marketing is realized profound analysis and market situation research (competitor activity, position of the branch, trends in the demand and supply), evaluation of the possibilities for using Internet for realization of competitive goods and services etc. It includes all activities related to the advertising activity of the company in Internet space: from design of the company's site to the sales realization.

Internet Marketing combines methods of using the Internet to promote and sell products and services. It includes:

- Information management – the management of information from various sources to one or more audiences, control over the structure, processing and delivery of information.
- Public relations – building sustainable relations with all publics in order to create a positive brand image.
- Customer service – the provision of service to customers before, during and after a purchase.
- Sales – the act of meeting buyers and providing them with a service for a negotiated compensation. Selling is a practical implementation of marketing.

Internet Marketing is important for all companies selling their products and services online. More than 2/3rds of all customers visit the web on regular basis and search for different types of products or services. Many companies compete for that customers and pay a high amount of money for developing of the effective internet marketing campaign.

Therefore to overcome the competition we need a competitive solution. The ASEIMC is designed as such solution.

Description of ASEIMC

The main purpose of the Automated System for Effective Internet Marketing Campaign is to increase the amount of sales of the company. At the end of the campaign we want to have more income than costs. The sales amount must be higher than the costs for the campaign. As bigger the positive difference between the profit and the invested costs as more effective is the internet marketing campaign.

Because of the big number of sites published in World Wide Web and big amount of repeating information it is very difficult for the modern enterprises to develop effective advertising strategy and which to be conformed to the limited budget of small and medium enterprises. The purpose of the automated system developed by us is to provide considerable competitive advantages of small and medium enterprises in the Internet space doing small investments.

The system works by doing preliminary survey (gathering of information) for the behavior and the specifics of the competing companies and branches and the data are gathered in a database which specially designed for this purpose. On the basis of these data an analysis of the strong and weak assets of the target company, whose advertising strategy is developed, is made. The information gathered in the database is used for analysis of the trends in the developing of close branches and working out forecast for probable innovations which will be made and which will affect the company activity directly or indirectly.

The system for gathering of information is a Web spider, which is developed by the author and which similarly to the traditional web robots travels over the Internet space and collects diverse data from the information published in World Wide Web.

The Architecture of ASEIMC

To realize its goals the ASEIMC is divided in the following modules:

1. Module for gathering of information from the global net. It is a web robot, designed for the purpose.
2. Database, in which the information gathered from module 1 is stored.
3. Module for analysis of the data from the database and working out of forecast of trends in the behavior of the competitors and competing branches.
4. Goal definition module. Before continuing with the planning of the company's advertising campaign in Internet it is necessary to define goals, which we wish to achieve through this advertising campaign. These goals may be:
 - a. To impose trade mark of the company;
 - b. To increase the number of the sales;
 - c. To enter new markets;
 - d. To promote a new product of service of the company;
 - e. To inform the society for changes in the company's policy etc.

This feature is realized through set of questions q which are logically ordered one after another. As a result the proper target zone is defined. These goals have not to contradict to the strategic company management.
5. Analysis of current state. Before continuing with planning and realization of the advertising campaign it is necessary to specify the position from which the company starts. This is necessary not only to be able to develop effective advertising strategy but also to evaluate the achieved results at the end of the advertising campaign.
6. Budget validation. A significant point in developing the company's advertising campaign is specifying of the financial funds which we have. Their amount is a limit, which defines the boundaries of carrying out our advertising campaign.
7. Keyword selection module. Next stage is to choose the key words and expressions which will help for advertising campaign realization. These words have to be the ones used by the users. This module provides information about which key words we have to use taking into consideration the searching for them by the users and the content of the site.
8. Competition analysis module. After the key words of campaign are specified, it is important to evaluate the chances of the company to become a leader in the most popular search engines by key words used by users. Therefore the competitors' web sites are analyzed according to these keywords. Their advantages and disadvantages are evaluated. Their behavior is forecasted. As a result the module prints a report containing instructions for the developing search engine optimization strategy.
9. Developing search engines optimization strategies module. It takes the report from the previous and builds the optimization strategy, which the company has to follow.
10. Website optimization and promotion module. The ability to realize the actual optimization of the web site based on the strategy developed in item 6. The promotion of the site in the search engines and Internet space is carried out.
11. Result evaluation module. At the end of each advertising campaign it is important the achieved results to be evaluated and effectiveness of the campaign to be specified.
12. Improving of the company's advertising strategy. This is a continuous activity directed to increasing the results.

Conclusion

The system designed by the author helps for increasing of the popularity of the company's web site and as a result of this it leads to increasing of the number of sales and the amount of the realized profit from the company activity. It can be used effectively not only by small and medium enterprises but also by transnational corporations. It contributes to achieving significant competitive advantages in Internet space at comparatively small investments.

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THE MODEL OF UNRELIABLE ELEMENTS (HUMAN RESOURCES) INTELLECTUAL MANAGEMENT SYSTEM ON THE BASIS OF THEIR PSYCHOLOGICAL AND PERSONAL CHARACTERISTICS

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Abstract: *The Article suggests a possible approach to creation of the Intellectual Management System for human resources and personnel (during their professional tasks solving), and that could consider personal characteristics and psychological condition of the human resources as an "unreliable" element. The Article describes some elements of the Intellectual Management System: professional activity model and "unreliable" element (human resources) model.*

Keywords: *The theory of unreliable elements, The knowledge system, The intelligent control.*

Introduction

Management in broad sense of word is the permanent process of influencing the object of management (person, collective, technological process, company, state) in order to achieve the optimal result within the minimal expenditures of time and resources.

Management exists for more than 7 thousands of years, it is social as it started since the appearance of the human relations. The trends of management development - methods, the attitude towards the object of management – during all the time were directed on improvement of the workers' social environment and more subtle coordination with every person in order to consider his individual characteristics and demands. This is quite natural, because, without people, there is no organization. Without the specific people, no organization can achieve its goals and survive. And this is extremely difficult to do this without effective human resources management – one of the most crucial aspects of the Theory and Practice of Management. To make the organization function effectively, it is necessary to properly organize the staff's working process, permanently controlling the workers' activity, using the different methods of management.

Specific type of management activity, which object is the workers collective – personnel, was called Personnel Management (Staff Management). It is specific because in the management of people it is necessary to consider such an indefinite, unreliable thing as "human factor".

Unreliable elements, within the context of management, are those elements that are not provided with reliable information on their real condition, their behavior can not be forecasted with the high level of probability. Unreliable elements in the Management theory are, first of all, human resources.

The achievements of new informational technologies today allow us to examine the possibility of automation of the management processes of human resources and personnel (during their professional tasks solving), which is one of the main reserves for increase the management effectiveness. Tens of years of local networks and Internet development suggested many types of technologies for organizing the communication between people and between the whole enterprises and program complexes, which could also be used in the management