

GEOMARKETING IS AN INNOVATIVE TECHNOLOGY BUSINESS

ГЕОМАРКЕТИНГ – ИННОВАЦИОННАЯ ТЕХНОЛОГИЯ ВЕДЕНИЯ БИЗНЕСА

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Abstract: Carried out the synthesis of concepts and theoretical approaches to the concept of geomarketing and given its definition the Developed model of geomarketing as a management system. Objectives and system components of geomarketing. The analytical problems geomarketing. Classified tasks for geomarketing applications. Methods a systematic and methodical tools of geomarketing. The proposed stages of geomarketing research. Separated geographic information system (GIS) for commercial and those that are freely available. Examples of modern geographic information systems, including functions of spatial analysis. Given additional opportunities GIS RaggioGraph 2013 company GfK. Formulated results of application of geomarketing. Clarified the role of geo-marketing agencies. The advantages and disadvantages of geomarketing at the macro level and the micro level of the economy. The main obstacle of the application of geomarketing research enterprises.

KEYWORDS: GEOMARKETING, MARKETING, GEOINFORMATION SYSTEM, SPATIAL ANALYSIS, HUFFMODEL, ROUTING, GEOFENCING, VISUALIZATION.

1. Introduction

Today increases the value of geomarketing as a key component in decision-making in business management. It takes into account the spatial component in decision-making, which is a derivative of marketing, but it has its own unique tools, tasks and goals. Therefore, in recent years, entrepreneurs are finding new, innovative approaches to meeting the needs of consumers. This approach is the application of GIS component in the formation of the marketing strategy of creating a single information space for management of spatially distributed resources [1].

Geomarketing is a technology marketing research for management decision-making using spatial data, that allows to consider the dynamics and development trends and to predict competitive behavior.

The concept of geomarketing consider from the point of view of three different concepts [2]:

under the geomarketing understand the geographical aspects of classic marketing, in particular the procedure of geographical market segmentation and geographic positioning of the product;

geomarketing is positioned as a marketing site;

consider geomarketing as a marketing of geographic knowledge and technologies.

In this article geomarketing will be considered as marketing management system spatial market research (Fig.1).

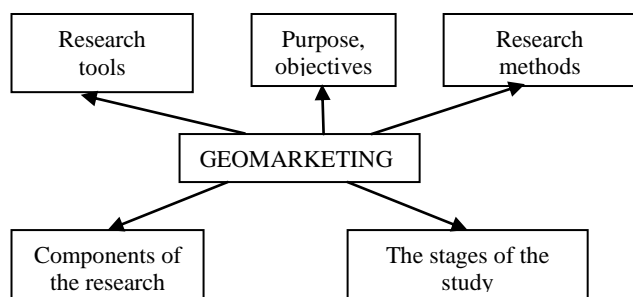


Fig. 1 system Model geomarketing enterprises

The main purpose of geomarketing is to establish optimal and profitable relationships producers and consumers of products based on geolocation to obtain the maximization of the positive effects.

Components of the system geomarketing enterprises are:

- concept development studies;
- information modeling;

- conducting applied research.

Geomarketing analysis can be carried out in the following stages:

- collection, processing of information;
- the decision of tasks;
- management of marketing activity of the enterprise.

Applications of geomarketing in the management of enterprises to conduct business, defines priority areas of development and sales; the amount of consumer traffic and possible reasons for his hesitation; forecasts of the territorial scope of the market.

In the result of application of geomarketing company achieved the main goal – improving economic efficiency through spatio-temporal study of various initial conditions. While investors and managers get timely information for strategy development, adoption of tactical management decisions, the rationale for the concepts of diversification of production and sales activities.

2. Problems that are solved geomarketing

Geomarketing can be used for the following analytical tasks:

1) territorial planning takes place at two levels. At the macro level is the selection of the most promising for business territorial entities within the state. At the micro level, territorial planning is carried out within the geographical areas of settlement. The objectives of these studies was to find factors explaining the occurrence and density of the road traffic [3]. These include: transport station, business centers, shopping centers, sports facilities, etc;

2) socio-demographic analysis, which is formed geodemographics card (except of geographical objects are layered with the demographic density depending on the movement of people between zones);

3) direct marketing is developing a complex of measures on building direct ties between consumers. Wherein the determined geographical dislocation of the target group;

4) market analysis – allows to build more accurate models and to identify patterns in consumer behavior. Also used to evaluate competitors and infrastructure geo-referenced and subject to traffic and pedestrian flows [4];

5) advertising and media planning. Advertising appropriate to do in the places of concentration of target consumers;

6) analysis of the location – select "ideal" location of the specified parameters [5];

7) the risk analysis is to find the risks in the set of optimal solutions for the discharge from them [6];

8) the organization of a network of branches works together with geologicistic;

9) examination of the property. Is to determine the importance of the construction site from the point of view of customers, as well as analysis of the situation with the territorial bind the primary and secondary market.

If we classify the tasks geomarketing spheres [7], we get the following (tab. 1).

Table 1

Classification task for geomarketing applications

Scope	Tasks
Production, promotion of goods and services	- optimization and control of areas of service and sales; - identifying promising points of sale and unoccupied territories; - the rating territories according to their market attractiveness
Work retail and trade networks	- the definition of the boundaries of different availability zones; - the detection of zones of competition; - evaluation of consumer potential for products in different categories; - the definition of any of various coverage areas
Gas stations and service stations	- the definition of availability zones and coverage of dealers and service centers; - evaluation of the effectiveness of the location of dealer and service centers
Banks and insurance companies	- optimization in location of branches and offices; - evaluation of potential areas of promotion and maintenance; - analysis of the use of banking and insurance services by the population

3. Methodological tools of geomarketing

The main tool of automation of marketing research are geographic information systems (GIS) [8]. Thanks to them, it is possible to carry out spatial analysis, which integrates a significant number of geographical factors and allows to correlate socio-demographic characteristics of the population, business data, and different geographical features of the area [9].

To the methodological tools of geomarketing include the following components:

1. Spatial analysis, which allows to predict and to offer options for the location of retail outlets thus to reach as many consumers as possible. Thus the problem of finding an optimally minimum number of outlets to reach the specified percentage of the total market share given the competitors [10, 11].

2. Economic-statistical methods (correlation and regression analysis), detect the spatial relationship between factors and the influence of individual factors on the dependent variable depending on the set objectives of the study.

3. Huffmodel allows to predict the flow of consumers at given retail outlets. This forecast is based on data about competitors and the distance to outlets, factors of attractiveness and many others. This tool allows you to rate existing outlets and to choose the best one [12].

4. The construction of buffer zones. Aims of geographical zoning of the study area according to the criterion of market coverage the delivery.

5. Routing. It is based on graph theory, which is partly taken from the transport logistics. Used to build optimal routes of cargo delivery.

6. The analysis of accessibility of the outlet. Determines the flow of customers according to their mind, the contact point (on foot, by car, by public transport) [13].

4. Examples of specialized GIS for marketing tasks

The effectiveness of geomarketing is based on the use of two basic techniques – marketing data are localized in space, and during the study of consumer behavior takes into account their spatial behavior. Geomarketing can solve two main tasks:

1) to determine the optimal position of the point of delivery of the goods or services;

2) to determine the optimal attributes of the points, including the range of goods or services, working hours, size of premises etc [14].

GIS provides the necessary tools to implement geomarketing technologies. A large amount of information that needs to store and process, makes them indispensable. However, there are specialized GIS development for marketing research [15].

ESRI offers a range of software tools that implements some geo models and specialized functions (attachment ArcGISBusinessAnalystDesktop). In particular, you can apply Huffmodel and to calculate and visualize trade zone on the basis of various parameters [16].

Today for geomarketing studies use two kinds of GIS – commercial and those that are freely available.

GfK has released software called RaggioGraph 2013. In its latest version this geomarketing solution lets users plan parallel sales structures, visualize international point of sale and use a wide range of features reporting. This program allows users to visualize their customers, target groups and relevant digital maps and carry out analyses using integrated data on potential buyers.

The program RaggioGraph 2013 helps users of all business areas quickly determine the distribution of potential and pinpoint strengths and weaknesses in their markets. Function RaggioGraph Planning offers professional tools for planning the best outlets for sales, calculate retail space and the planning of effective visits to customers.

Additional new features RaggioGraph 2013 [17]:

- new tools for analysis and visualization. New-friendly interface provides quick access to the software by more than 100 tools for analysis and visualization. Rapid viewing of the map display allows you to quickly and easily select the best option;

- integrated planning on a single base map. There it is possible to plan the entire territorial structure on the base card. Resulting in reduced number of errors when planning and optimizing the sales structure;

- advanced international geocoding. The program supports global planning, which makes it attractive for companies active on the international stage. Localization and analysis of data on street-level can now be carried out not only in Europe but in other markets, rapidly developing, such as India, the Philippines, Singapore, Brazil, Mexico, USA;

- map data on potential buyers. The program has data on the potential purchasing power and digital maps for Germany, Austria, Switzerland and other European countries.

Geographic information system free access offers system 2GIS, including with the online version of the program, which is available at the Internet URL:<http://2gis.EN>. this program includes: maps, directories, search use of public and private transport, a ruler to measure the distance to the subject, the presence of traffic jams on the streets, and the like.

5. Conclusions

Geomarketing is the technology of marketing research to make strategic, conceptual and managerial solutions based on the methods of geographic analysis of various spatially-distributed objects and phenomena. Such studies allow:

- to identify the target audience at the right territorial unit;
- conduct competitive analysis;
- to determine the best location for the new object;
- to give a forecast of the turnover of commercial real estate;
- to develop a concept for an existing or planned;

- to assess the best use of the land, and the like.

So, the geomarketing is the combination of knowledge about the market and geography. Because potential market, consumption of goods and services vary spatially and geographically, it is necessary to use a suitable analysis tool, which helps to develop strategies to reach consumers/clients at the regional, city and district level for all companies that interact with consumers.

There are geomarketing agencies that specialize in creating finished reports, and conduct research to order. Through such research, the company is reviewing the aspects of its activities from a different angle that is different from the results of traditional market research, which are customer-oriented and even competitive intelligence and benchmarking.

The advantages of geomarketing micro-level us include: the possibility to visualize the formation of sustainable infrastructure or trade networks; the choice of optimal and efficient location and assessment of the possibility of its territorial expansion and diversification; assessment of the competitors from the point of view of determining the strength of ties and the intensity of the competitive struggle; market business valuation and the determination of its market value taking into account the geographical component.

Advantage of macro is to balance the resource consumption, the optimal ratio between the number of points of sale and consumption, and the maximization of the effect of "optimal locations".

The main obstacle in the use of geomarketing in Ukraine is the lack of information and limited access to baseline spatial, demographic and statistical data on which it is necessary to conduct further analyses taking into account the available instrumentation.

So the modern geomarketing allows a comprehensive (includes subjects: marketing, logistics, geography, Geoinformatics) study of global and local economic processes, which is very important for spatial Economics and business.

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