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# **GEO-MARKETING AS AN EFFECTIVE SALES SUPPORT TOOL OF BANKS AND INSURANCE COMPANIES**

**Geo-marketing: hatékony eszköz az eladások fokozására bankoknál és biztosító társaságoknál**

## **1. Sales network's needs**

The goal of all banks and insurance is to strengthen their presence in the Hungarian insurance and financial market. To be competitive on this very fast growing market they have to build a very flexible and dynamic strategy. This latter means to add value to products continuously, to edge into the new business and to enter niche markets thus remaining up-to-date with social, environmental changes and consumer behavior. Today all winning strategies are dynamic and must be supported by Internet. The idea, which emerged, supports the dynamic strategy building. The idea relies on the valuable knowledge about the clientele (client database), on the statistical database of the Hungarian population (result of census conducted in 2000), and on the usage of the new business information technologies within a secondary research. The research results meet the main expectations of the sales network division management and that of the agents. This research method was elaborated by a marketing team of an insurance company backed by the professional support of Hungarian Gallup Institute.

## **2. Main feature of the business GIS (Geo-Information System)**

Business GIS is more than just geo-marketing for targeting prospects in a direct mail campaign. It means the support of agent network optimisation, sales objectives set up, market potential modeling, distribution channel optimisation.

The main purpose of Business GIS is to answer the question: „where?” as precisely as possible.

- Where are my customers?
- Where are my agents?
- What are the catchments of an agent?
- Where should I send a direct mail or make a call?

If we use GIS, it is very important that it should be used uniformly in each town, in the whole country. It is not a solution that our approach is applicable in Budapest, but not in any other town.

Every agent/director knows his town better than we would ever be able to know it – from Budapest – with the best geo-marketing system. But the business GIS has the advantage to handle the spatial and customer data with a uniform way. From the head office we can overview a larger area than a branch manager can.

One of the main expectations of the Sales Network management from the marketing division is to get a real picture about the market environment in question in order to build real strategy and sales plans on Agency's, Unit's and agents' level. Furthermore the primarily needs of the management are to monitor and control how sales plans are realized.

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The main requirement of the agents is to be provided with "hot leads". The agents can reduce their risks (fear from the refusals) by getting "hot leads", their costs in several senses (avoid unnecessary time consumption, money expenditure for petrol and telephone).

The research method which was elaborated was partly realised a few years ago by conducting a pilot survey in an insurance company. We organized a so-called geo-marketing survey, which is not a traditional secondary research method. The essence of the survey was to integrate the database marketing with electronic visualising (mapping) and with information technology. The idea has been remained in "dream" phase ever since. The main reason to stop this type of research was mainly based on the sales network's resistance against applying new technologies. We think that this technology of market monitoring can be more easily adopted nowadays as during the past years the sales force got used to the use of the computer, the Intranet and the Internet in their everyday life.

Our main purpose is to give an electronic tool into the hand of the sales supporting their expectations and needs. The core idea includes integration of the following:

1. Available databases (official statistical database about the Hungarian population).
2. Database of clients.
3. Electronic maps created by geo-information technique.
4. Intranet service within the company, which can easily deliver the results to the sales.

By combining the above-mentioned elements we can get smart electronic maps visualising the required market information.

## 2. Description of the idea

The preparation of such "geo-demographic analysis" for the sales requires as much time as collecting data from statistical books, drawing big tables and elaborating enormous amount of data are rather time-consuming. The method of seeking market opportunities and evaluating the firm's market penetration was traditional. Therefore the main purpose is to use advantages of the new information technology, which can easily handle big databases, to use statistical methods (descriptive analysis, regression method, etc.), to visualise the data in smart maps using several symbols for easy understanding.

### 2.1. RESEARCH METHOD

The starting point of the idea was based on a hypothesis: people living near to each other conduct similar ways of life, live on the same income level, they have similar purchasing habits. Thus, statements are true for people as well, living near to our clients.

The objectives of the geo-demographic analysis: using geo-information technique answers on the next questions:

1. What is the company's market penetration like on the monitored levels (regions, counties, settlements, electoral districts, or on "local" market of agencies?)
2. Where are the potential markets, where we have to strengthen our sales forces?
3. Where do we have to develop agents' network (recruitment), to build new units/agencies?
4. How large is the gap between the achieved results of an agency and the potential market possibilities?
5. What is the insurance profile of the clients on the monitored areas like?
6. What is the target group's social demographic profile like on the monitored levels by product?
7. Where do our clients live?
8. Where do our potential clients live?
9. How does our target group look like (by each product/settlement)?

The research method of the analysis is a secondary survey by using a non-traditional way of data collection and analysis. Geo-marketing is equal with integration of mapping plus database marketing plus geo-information technique.

### 2.2. TYPES OF DATA WE NEED TO GATHER AND CREATE:

- a) Clients data attributes:
  - clients' leads (ZIP code, county, settlement, street),
  - clients' age,
  - annual premium/client,

- insurance or banking product type(s),
- number of insurance or banking products,
- code of the agent,
- code of the agency.

b) Statistical database of population (data selection from the Hungarian census):

- name of settlement
- number of inhabitants
- volume of personal income paid by the settlement
- number of inhabitants with higher education
- number of economically active population

c) Aggregated data on the monitored levels:

- level of personal income / inhabitant
- clients' number / 100 inhabitants
- annual premium / one inhabitant
- proportion of economically active population
- market potential index: it is based on building up a regression model. We took into consideration 150 social-demographic attributes of the inhabitants of the monitored geographical area, than we were searching connection between the social-demographic attributes of the population and the achieved volume of the annual premium in a given area.

In the country-side there were four attributes, showing strong correlation between the volumes of the annual premium:

- personal income level
- proportion of people with higher education
- proportion of the economically active population
- number of inhabitants

The market potential index created for Budapest is based on other attributes (five attributes) because of the lack of personal income data in the monitored level (electoral district). These data are the following:

- proportion of people with higher education
- proportion of inhabitants between 35-49 years
- proportion of the inhabitants living in houses built after 1985
- proportion of the inhabitants living in family houses
- proportion of inhabitants living in flats with more than four

### 2.3. THE VISUALISING LEVELS OF THE AVAILABLE DATA:

a) Country-side:

- county level (19 counties)
- settlement level (3090 settlements in Hungary)
- street level (280 with more than 5000 inhabitants)

b) Budapest:

- district level (there are 23 districts)
- electoral districts (503)
- blocks of buildings (1553)

## 3. Main results of the analysis

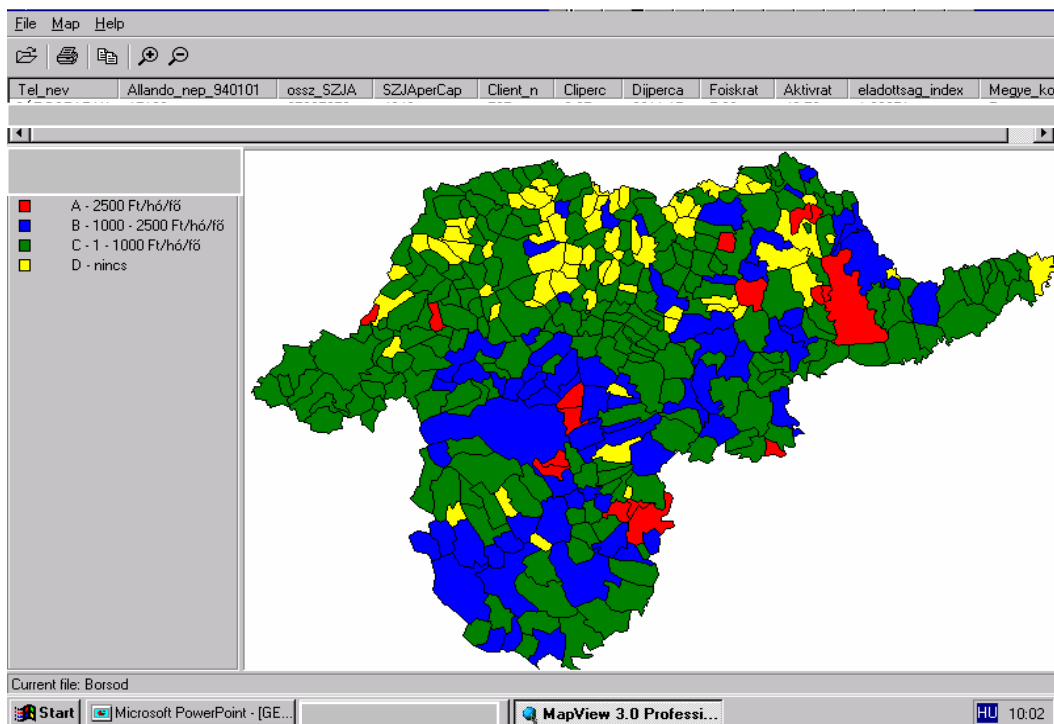
### 1. Market penetration maps

- products: Insurance or other financial products
- clients/target group
- agents' distribution

2. Potential market maps
3. Two-level-maps by agencies (first level: market potential, second level: the agents' coverage in addition clients' insurance profile to be chosen from a roll down menu)
4. Data appearance on the ruler
5. Structured database behind the maps (in Excel format)

## 4. Illustration of the maps

### 1. MARKET PENETRATION OF A CERTAIN COUNTY BY SETTLEMENTS



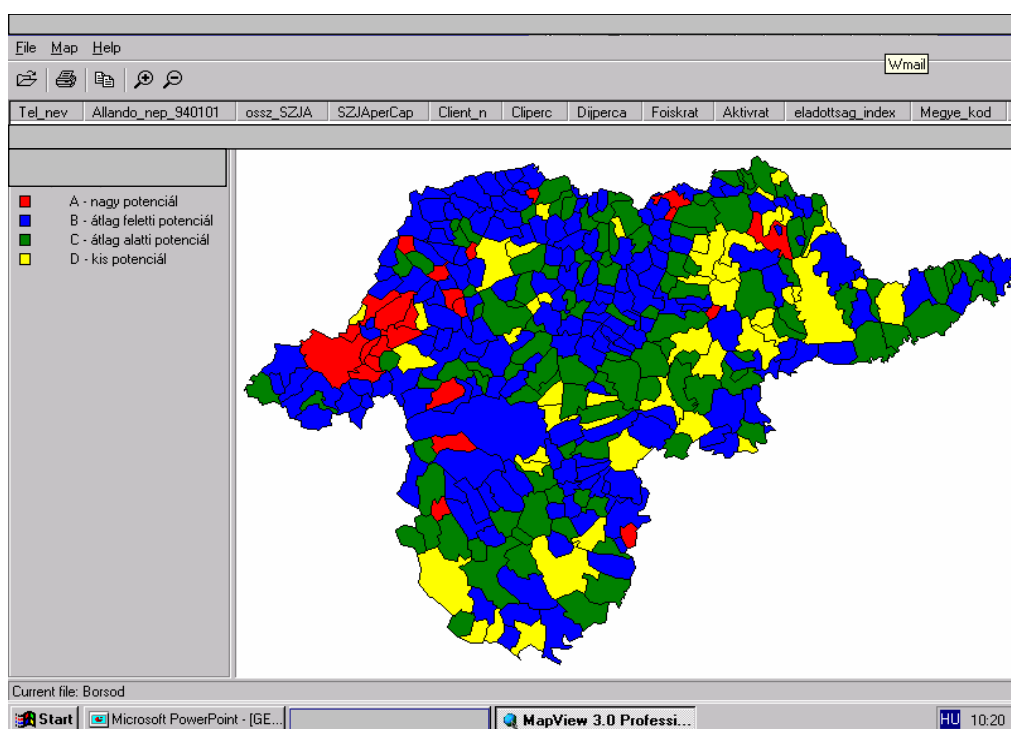
The measure of the market penetration of products is visualised by four colors. The coverage shows how much HUF per habitant was spent on financial product(s) in the given settlement. By clicking on the settlement area data characterising the settlement and the clients' profile appear on the ruler.

#### *Market potential map of a county by settlements*

The market potential is visualised by four colors. If the market potential index is negative the potential is big (red color). The index number is shown on the ruler.

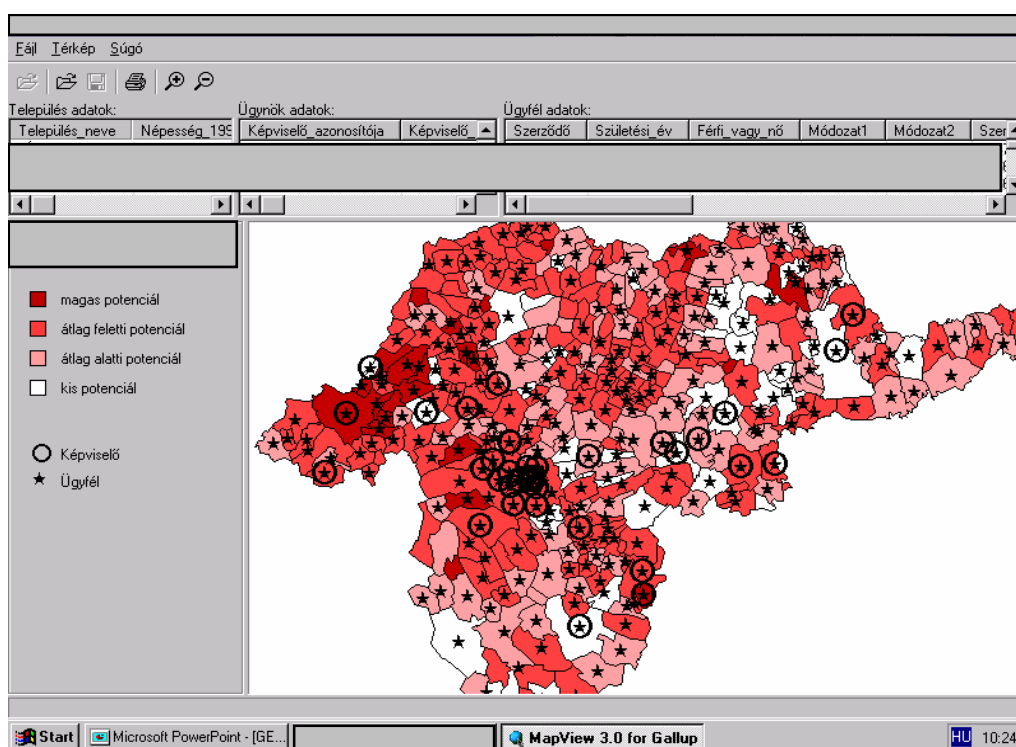
The following data are shown on the ruler (which is a moving ruler):

- name of settlement
- number of inhabitants
- personal income paid by the settlement
- personal income per inhabitant
- number of clients
- number of client per 100 of inhabitants
- volume (in HUF) of the annual premium per one inhabitant
- proportion of inhabitants with higher education
- proportion of economically active population
- market potential index



### *Two-levels-map for supporting building up sales system*

Creating two-levels-map supports the sales to open new agencies in the areas where the potential market is big, which gives opportunity to penetrate into low covered areas with relatively high purchasing power. The first level of map shows market potential and second level shows the agents' coverage of a particular location. In addition clients' insurance profile can be known by rolling down menu.



*Proposed method for developing the market penetration map in Budapest*

The density of Budapest by habitants is much higher than in the country-side. Because of the lack of data of the personal income in electoral districts we broke down Budapest into 1553 blocks of building (in one-block live app. 1100 inhabitants). To get more sophisticated picture about the income of Budapest's inhabitants we geo-coded our clients having an investment type policy. The given picture gives more real income distribution, more real market potential. Because of the lack of digital maps in this density about Budapest we have got this map in A/O paper format and scanned format, which is a non-smart map.

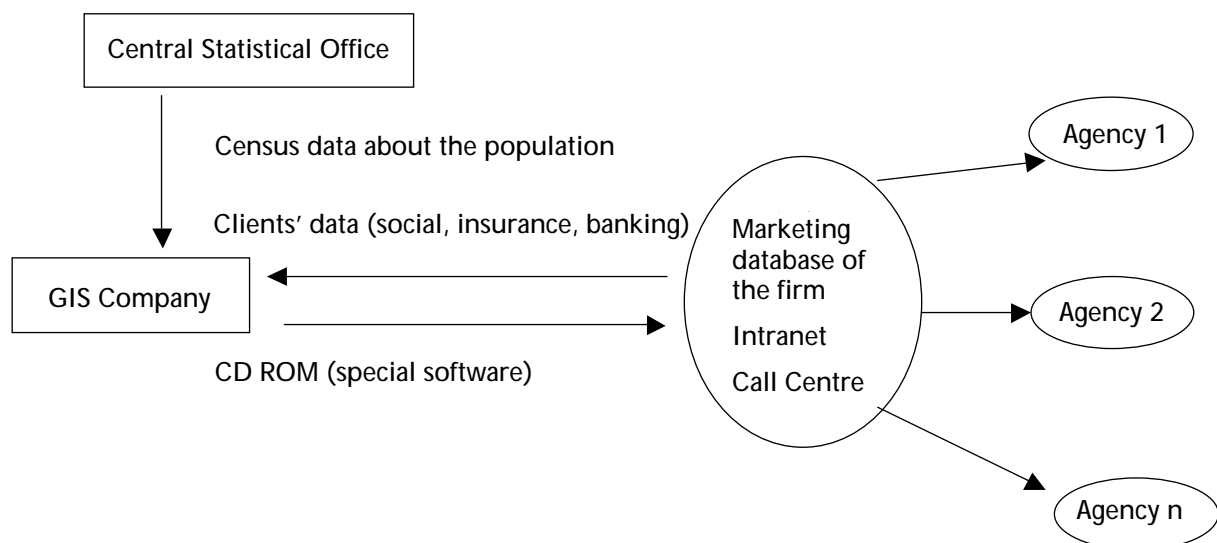
## 5. Realisation process of the geo-marketing analysis

To geo-code the clients and visualise them by building up *digitalis* maps we need special geo-information technique (GIS – Geo Information System), which is a special software. Company owning digital maps of settlement (on electoral level and street level as well) (MapInfo, Landinfo, Bentley, ESRI, GeoX, etc) can create special software tailor-made for different business needs.

To make this information available for the sales force we need software specially developed e for the users. By using it sales people can easily handle this program for visualising the information needed.

This special software can be installed on the Intranet and agents can download it from the agencies' PCs. The access to the information is limited (because agencies should reach only their own information, so the availability should be attached to special password and user name).

*Route of the distribution of the geo-marketing information*



*GIS company' tasks:*

- to develop GIS software
- to build the statistical and clients' database for digitalising
- doing regression analysis or aggregation of data
- to prepare digital maps
- to develop special software for users

*The firm's tasks:*

- to select the data base
- to define the direction and the depth of the data processing by the GIS company
- to agree on the used symbols and visualising technique with the GIS company
- to agree on the appearing data on the ruler

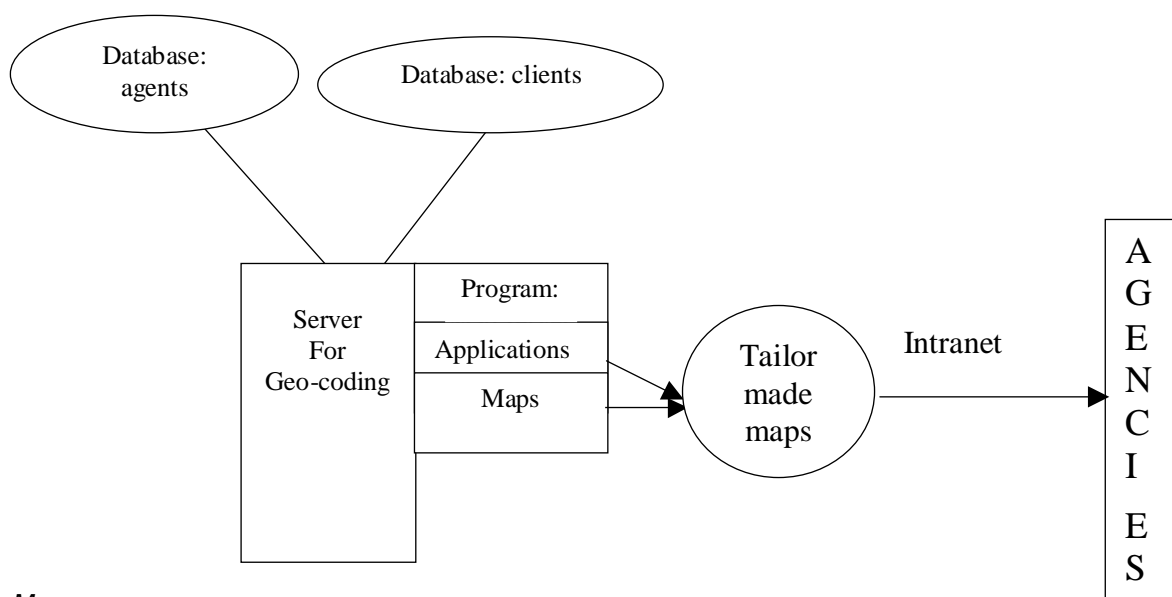
- to educate the sales network to understand and to use the special software
- to provide the availability of the results through Intranet
- to generate hot leads (Call Centre)
- to provide the sales network with continuously updated maps
- to control the efficiency of use

## 6. Tools and Measures

The goal of this method is to build an own monitoring geo-marketing system, which is available for the whole sales network by Intranet, and which is regularly updated. To build such a system we should answer the following:

- How this geo-information system works?
- How much does it cost?
- How much time we need to realise it?
- What do we have now and what do we need to buy?

The structure of the geo-information system:



### Map server

Map server software is a powerful Internet/Intranet mapping solution that provides a framework for centrally building business GIS services and data to a broad audience. By using map server, we can deliver focused, lightweight GIS applications and data to many concurrent users, within both our headquarter and our network in the Intranet. In Hungary both the Mapguide (from Autodesk) and the ARCSIMS (from ESRI) are widely used as map server software.

### Geocoding server

Street-level geocoding – enabling us to accurately locate both our customers and agents on the ground – is the starting point and foundation for any spatial business analysis and CRM. Transforming the addresses into co-ordinates, the “street level geocoding”, is not a simple job even if the proper maps and software are available, because the addresses usually are not correct. The GeoScript server provides the checking and correction of addresses, and turns them into geographic objects that can be displayed on a map.

### Maps

The maps give the spatial reference for the geocoding. The DSM digital street maps cover each settlement with more than 5,000 habitants, and some of the smaller ones, which have remarkable market potential.

